INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

TO: Interested Parties / Applicant

DATE: August 4, 2010

RE: U.S. Steel - Gary Works / 089-28848-00121

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot12/03/07

IDEM

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

Mr. Mark Jeffery
U.S. Steel
Penn Liberty Plaza 1; 1350 Penn Avenue, Suite 200
Pittsburgh, PA 15222-1211

August 4, 2010

Re: 089-28848-00121
Significant Source Modification to
Part 70 Operating Permit: T089-7663-00121

Dear Mr. Jeffery:

U.S. Steel - Gary Works was issued Part 70 Operating Permit T089-7663-00121 on August 18, 2006, for an integrated steel mill. An application to modify the source was received on January 4, 2010. Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction at the source:

Carbon Alloy Synthesis Plant (CASP) A

(a) Raw Material Receiving Handling and Silos A, identified as RMRHSA, approved for construction in 2010, consisting of the following:

(1) One (1) CDA1 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) baghouse (OR-A-01-DC1105), exhausting to stack OR-A-01-ST1105.

(2) One (1) CDA2 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) dust collector (OR-A-01-DC2105), exhausting to stack OR-A-01-ST2105.

(3) Five (5) dry coal storage silos, each with a storage capacity of 240 tons of dried coal, ducted to dedicated baghouses (OR-A-02-DC1070, OR-A-02-DC2070, OR-A-02-DC3070, OR-A-02-DC4070, and OR-A-02-DC5070, respectively), exhausting to stacks OR-A-02-ST1070, OR-A-02-ST2070, OR-A-02-ST3070, OR-A-02-ST4070, and OR-A-02-ST5070, respectively.

(4) Five (5) blend #1 weigh feeders, each with a rated capacity of 40 tons per hour, and one (1) drag conveyor, with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-A-03-DC1105), exhausting to stack OR-A-03-ST1105.

(5) Four (4) blend #1 feed hoppers, with a rated capacity of 30 tons per hour, and two (2) blend #1 hopper feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-A-04-DC1105), exhausting to stack OR-A-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSA facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDA1, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER A1 and FER A2 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-A-01-CY-1305) and one (1) dust collector (OR-A-01-DC1205), in series, exhausting to stack OR-A-01-ST1215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCA1, approved for construction in 2010, with a maximum capacity of 100 tons per hour, ducted to one (1) dust collector (OR-A-02-DC1105), exhausting to stack OR-A-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDA2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER A3 and FER A4 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-A-01-CY-2305) and one (1) dust collector (OR-A-01-DC2205), in series, exhausting to stack OR-A-01-ST2215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCA2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, ducted to one (1) dust collector (OR-A-02-DC2105), exhausting to stack OR-A-02-ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERA1, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB A1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR1015), one (1) cyclone (OR-A-09-CY-1025), and one (1) baghouse (OR-A-09-DC1030), in series, exhausting to stack OR-A-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERA2, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB A2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR2015), one (1) cyclone (OR-A-09-CY-2025), and one (1) baghouse (OR-A-09-DC2030), in series, exhausting to stack OR-A-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERA3, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB A3, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR3015), one (1) cyclone (OR-A-09-CY-3025), and one (1) baghouse (OR-A-09-DC3030), in series, exhausting to stack OR-A-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERA4, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB A4, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR4015), one (1) cyclone (OR-A-09-CY-4025), and one (1) baghouse (OR-A-09-DC4030), in series, exhausting to stack OR-A-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM A1 - RCLM A4, approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FER A1 - FER A4, consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 0F - 800 0F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB A1 - FERAB A4, respectively.
(2) Four (4) coal tar surge tanks, one (1) per FER.

(k) One (1) Carborec Storage and Blending Area A, identified as CBSBA, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to a baghouse (OR-A-05-DC1205), exhausting to stack OR-A-05-ST1205.(2) Six (6) weigh feeders, each with a rated capacity of 40 tons per hour, and blend #2 drag conveyors, each with a rated capacity of 75 tons per hour, ducted to a baghouse (OR-A-05-DC1405), exhausting to stack OR-A-05-ST1405.
(3) One (1) Carborec storage silo, with a storage capacity of 240 tons, ducted to a baghouse (OR-A-05-DC6070), exhausting to stack OR-A-05-ST6070.
(4) One (1) blend #2 surge bin, with a storage capacity of 440 tons, ducted to a baghouse (OR-A-06-DC1405), exhausting to stack OR-A-06-ST1405.
(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, each with a rated capacity of 30 tons per hour, billet belt conveyors and one (1) billet roller screener, each with a rated capacity of 80 tons per hour, and one (1) billet fines weigh feeder, with a rated capacity of 10 tons per hour, ducted to a baghouse (OR-A-06-DC1205), exhausting to stack OR-A-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

(l) One (1) billet transfer area, approved for construction in 2010, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-A-06-HP1125, with a maximum rated capacity of 10 tons per hour.
(2) Three (3) billet fines open belt conveyors, identified as OR-A-06-CB1130, OR-A-06-CB1140, and OR-A-06-CB1145, each with a maximum rated capacity of 10 tons per hour.
(3) One (1) billet belt conveyor, identified as OR-A-06-CB1110, with a maximum rated capacity of 60 tons per hour.
(4) One (1) billet hopper, identified as OR-A-06-HP1115, with a maximum storage capacity of 3 tons.

(5) Four (4) billet belt conveyors, identified as OR-A-06-CB1120, OR-A-06-CB2120, OR-A-06-CB1126, and OR-A-06-CB2126, each with a maximum rated capacity of 60 tons per hour.
(6) Two (2) billet vibratory feeders, identified as OR-A-06-VF1125 and OR-A-06-VF2125, each with a rated maximum capacity of 30 tons per hour.
(7) Two (2) trolley car loading stations, collectively identified as OR-A-06-LD1128, each with maximum capacity of 30 tons per hour.
(8) One (1) billet hopper, identified as OR-A-06-HP1135, and five (5) belt conveyors, identified as OR-A-06-CB1150, OR-A-06-CB1160, OR-A-06-CB1170, OR-A-06-CB1180, and OR-A-06-CB1190, each with a rated capacity of 30 tons per hour.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRA1, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB A1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-A-10-SR1010), one (1) cyclone (OR-A-10-CY-1115), and one (1) baghouse (OR-A-10-DC1020), in series, exhausting to stack OR-A-10-ST1025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRA2, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB A2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-A-10-SR2010), one (1) cyclone (OR-A-10-CY-2115), and one (1) baghouse (OR-A-10-DC2020), in series, exhausting to stack OR-A-10-ST2025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(o) One (1) Finish Product Handling and Loading process, approved for construction in 2010, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-A-08-CB1020, OR-A-08-CB1030, OR-A-08-CB2020, and OR-A-08-CB2030, each with a maximum rated capacity of 20 tons per hour.
(2) One (1) Cokonyx belt conveyor, identified as OR-A-08-CD1035, with a maximum rated capacity of 40 tons per hour.

(p) One (1) lime storage silo, identified as LSA, approved for construction in 2010, with a storage capacity of 50 tons of lime, equipped with one (1) dust collector (OR-A-12-DC1006), exhausting to stack OR-A-12-ST1006.

(q) Two (2) diesel-fired emergency generators, identified as EGA1 and EGA2, approved for construction in 2010, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(r) One (1) natural gas-fired emergency generator, identified as EGA3, approved for construction in 2010, with a maximum rated output of 450 kW. Under 40 CFR 60, Subpart IIII, this is considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

Carbon Alloy Synthesis Plant (CASP) Module B

(a) Raw Material Receiving Handling and Silos B, identified as RMRHSB, approved for construction in 2010, consisting of the following:

(1) One (1) CDB1 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) baghouse (OR-B-01-DC1105), exhausting to stack OR-B-01-ST1105.

(2) One (1) CDB2 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) dust collector (OR-B-01-DC2105), exhausting to stack OR-B-01-ST2105.

(3) Five (5) dry coal storage silos, each with a storage capacity of 240 tons of dried coal, ducted to dedicated baghouses (OR-B-02-DC1070, OR-B-02-DC2070, OR-B-02-DC3070, OR-B-02-DC4070, and OR-B-02-DC5070, respectively), exhausting to stacks OR-B-02-ST1070, OR-B-02-ST2070, OR-B-02-ST3070, OR-B-02-ST4070, and OR-B-02-ST5070, respectively.

(4) Five (5) blend #1 weigh feeders, each with a rated capacity of 40 tons per hour, and one (1) drag conveyor, with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-B-03-DC1105), exhausting to stack OR-B-03-ST1105.

(5) Four (4) blend #1 feed hoppers, with a rated capacity of 30 tons per hour, and two (2) blend #1 hopper feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-B-04-DC1105), exhausting to stack OR-B-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSB facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDB1, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER B1 and FER B2 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-B-01-CY-1305) and one (1) dust collector (OR-B-01-DC1205), in series, exhausting to stack OR-B-01-ST1215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCB1, approved for construction in 2010, with a maximum capacity of 100 tons per hour, ducted to one (1) dust collector (OR-B-02-DC1105), exhausting to stack OR-B-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDB2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER B3 and FER B4 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-B-01-CY-2305) and one (1) dust collector (OR-B-01-DC2205), in series, exhausting to stack OR-B-01-ST2215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCB2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, ducted to one (1) dust collector (OR-B-02-DC2105), exhausting to stack OR-B-02-

ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB1, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB B1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-B-09-SR1015), one (1) cyclone (ORB-09-CY-1025), and one (1) baghouse (OR-B-09-DC1030), in series, exhausting to stack OR-B-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB2, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB B2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-B-09-SR2015), one (1) cyclone (OR-B09-CY-2025), and one (1) baghouse (OR-B-09-DC2030), in series, exhausting to stack OR-B-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB3, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB B3, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-B-09-SR3015), one (1) cyclone (OR-B-09-CY-3025), and one (1) baghouse (OR-B-09-DC3030), in series, exhausting to stack OR-B-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB4, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB B4, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-B-09-SR4015), one (1) cyclone (OR-B-09-CY-4025), and one (1) baghouse (OR-B-09-DC4030), in series, exhausting to stack OR-B-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM B1 - RCLM B4, approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FER B1 - FER B4, consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 0F - 800 0F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB B1 - FERAB B4, respectively.
(2) Four (4) coal tar surge tanks, one (1) per FER.

(k) One (1) Carborec Storage and Blending Area B, identified as CBSBB, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to a baghouse (OR-B-05-DC1205), exhausting to stack OR-B-05-ST1205.

(2) Six (6) weigh feeders, each with a rated capacity of 40 tons per hour, and blend #2 drag conveyors, each with a rated capacity of 75 tons per hour, ducted to a baghouse (OR-B-05-DC1405), exhausting to stack OR-B-05-ST1405.
(3) One (1) Carborec storage silo, with a storage capacity of 240 tons, ducted to a baghouse (OR-B-05-DC6070), exhausting to stack OR-B-05-ST6070.
(4) One (1) blend #2 surge bin, with a storage capacity of 440 tons, ducted to a baghouse (OR-B-06-DC1405), exhausting to stack OR-B-06-ST1405.
(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, each with a rated capacity of 30 tons per hour, billet belt conveyors and one (1) billet roller screener, each with a rated capacity of 80 tons per hour, and one (1) billet fines weigh feeder, with a rated capacity of 10 tons per hour, ducted to a baghouse (OR-B-06-DC1205), exhausting to stack OR-B-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

(l) One (1) billet transfer area, approved for construction in 2010, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-B-06-HP1125, with a maximum rated capacity of 10 tons per hour.
(2) Three (3) billet fines open belt conveyors, identified as OR-B-06-CB1130, OR-B-06-CB1140, and OR-B-06-CB1145, each with a maximum rated capacity of 10 tons per hour.
(3) One (1) billet belt conveyor, identified as OR-B-06-CB1110, with a maximum rated capacity of 60 tons per hour.
(4) One (1) billet hopper, identified as OR-B-06-HP1115, with a maximum storage capacity of 3 tons.
(5) Four (4) billet belt conveyors, identified as OR-B-06-CB1120, OR-B-06-CB2120, OR-B-06-CB1126, and OR-B-06-CB2126, each with a maximum rated capacity of 60 tons per hour.
(6) Two (2) billet vibratory feeders, identified as OR-B-06-VF1125 and OR-B-06-VF2125, each with a rated maximum capacity of 30 tons per hour.
(7) Two (2) trolley car loading stations, collectively identified as OR-B-06-LD1128, each with maximum capacity of 30 tons per hour.
(8) One (1) billet hopper, identified as OR-B-06-HP1135, and five (5) belt conveyors, identified as OR-B-06-CB1150, OR-B-06-CB1160, OR-B-06-CB1170, OR-B-06-CB1180, and OR-B-06-CB1190, each with a rated capacity of 30 tons per hour.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRB1, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB B1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-B-10-SR1010), one (1) cyclone (OR-B-10-CY-1115), and one (1) baghouse (OR-B-10-DC1020), in series, exhausting to stack OR-B-10-ST1025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRB2, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB B2, equipped with natural gas-fired burners with a combined maximum heat input

capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-B-10-SR2010), one (1) cyclone (OR-B-10-CY-2115), and one (1) baghouse (OR-B-10-DC2020), in series, exhausting to stack OR-B-10-ST2025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(o) One (1) Finish Product Handling and Loading process, approved for construction in 2010, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-B-08-CB1020, OR-B-08-CB1030, OR-B-08-CB2020, and OR-B-08-CB2030, each with a maximum rated capacity of 20 tons per hour.
(2) One (1) Cokonyx belt conveyor, identified as OR-B-08-CD1035, with a maximum rated capacity of 40 tons per hour.

(p) One (1) lime storage silo, identified as LSB, approved for construction in 2010, with a storage capacity of 50 tons of lime, equipped with one (1) dust collector (OR-B-12-DC1006), exhausting to stack OR-B-12-ST1006.

(q) Two (2) diesel-fired emergency generators, identified as EGB1 and EGB2, approved for construction in 2010, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(r) One (1) natural gas-fired emergency generator, identified as EGB3, approved for construction in 2010, with a maximum rated output of 450 kW. Under 40 CFR 60, Subpart IIII, this is considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

<u>Carbon Alloy Synthesis Plant (CASP) Module C</u>

(a) Raw Material Receiving Handling and Silos C, identified as RMRHSC, approved for construction in 2010, consisting of the following:

(1) One (1) CDC1 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) baghouse (OR-C-01-DC1105), exhausting to stack OR-C-01-ST1105.
(2) One (1) CDC2 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) dust collector (OR-C-01-DC2105), exhausting to stack OR-C-01-ST2105.
(3) Five (5) dry coal storage silos, each with a storage capacity of 240 tons of dried coal, ducted to dedicated baghouses (OR-C-02-DC1070, OR-C-02-DC2070, OR-C-02-DC3070, OR-C-02-DC4070, and OR-C-02-DC5070, respectively), exhausting to stacks OR-C-02-ST1070, OR-C-02-ST2070, OR-C-02-ST3070, OR-C-02-ST4070, and OR-C-02-ST5070, respectively.
(4) Five (5) blend #1 weigh feeders, each with a rated capacity of 40 tons per hour, and one (1) drag conveyor, with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-C-03-DC1105), exhausting to stack OR-C-03-ST1105.
(5) Four (4) blend #1 feed hoppers, with a rated capacity of 30 tons per hour, and two (2) blend #1 hopper feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-C-04-DC1105), exhausting to stack OR-C-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSC facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDC1, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER C1 and FER C2 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-C-01-CY-1305) and one (1) dust collector (OR-C-01-DC1205), in series, exhausting to stack OR-C-01-ST1215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCC1, approved for construction in 2010, with a maximum capacity of 100 tons per hour, ducted to one (1) dust collector (OR-C-02-DC1105), exhausting to stack OR-C-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDC2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER C3 and FER C4 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-C-01-CY-2305) and one (1) dust collector (OR-C-01-DC2205), in series, exhausting to stack OR-C-01-ST2215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCC2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, ducted to one (1) dust collector (OR-C-02-DC2105), exhausting to stack OR-C-02-ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC1, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB C1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-C-09-SR1015), one (1) cyclone (OR-C-09-CY-1025), and one (1) baghouse (OR-C-09-DC1030), in series, exhausting to stack OR-C-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC2, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB C2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-C-09-SR2015), one (1) cyclone (OR-C-09-CY-2025), and one (1) baghouse (OR-C-09-DC2030), in series, exhausting to stack OR-C-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC3, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB C3, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-

C-09-SR3015), one (1) cyclone (OR-C -09-CY-3025), and one (1) baghouse (OR-C-09-DC3030), in series, exhausting to stack OR-C-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC4, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB C4, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-C-09-SR4015), one (1) cyclone (OR-C-09-CY-4025), and one (1) baghouse (OR-C-09-DC4030), in series, exhausting to stack OR-C-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM C1 - RCLM C4, approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FER C1 - FER C4, consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 0F - 800 0F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB C1 - FERAB C4, respectively.
(2) Four (4) coal tar surge tanks, one (1) per FER.

(k) One (1) Carborec Storage and Blending Area C, identified as CBSBC, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to a baghouse (OR-C-05-DC1205), exhausting to stack OR-C-05-ST1205.
(2) Six (6) weigh feeders, each with a rated capacity of 40 tons per hour, and blend #2 drag conveyors, each with a rated capacity of 75 tons per hour, ducted to a baghouse (OR-C-05-DC1405), exhausting to stack OR-C-05-ST1405.
(3) One (1) Carborec storage silo, with a storage capacity of 240 tons, ducted to a baghouse (OR-C-05-DC6070), exhausting to stack OR-C-05-ST6070.
(4) One (1) blend #2 surge bin, with a storage capacity of 440 tons, ducted to a baghouse (OR-C-06-DC1405), exhausting to stack OR-C-06-ST1405.
(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, each with a rated capacity of 30 tons per hour, billet belt conveyors and one (1) billet roller screener, each with a rated capacity of 80 tons per hour, and one (1) billet fines weigh feeder, with a rated capacity of 10 tons per hour, ducted to a baghouse (OR-C-06-DC1205), exhausting to stack OR-C-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

(l) One (1) billet transfer area, approved for construction in 2010, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-C-06-HP1125, with a maximum rated capacity of 10 tons per hour.
(2) Three (3) billet fines open belt conveyors, identified as OR-C-06-CB1130, OR-C-06-CB1140, and OR-C-06-CB1145, each with a maximum rated capacity of 10 tons per hour.
(3) One (1) billet belt conveyor, identified as OR-C-06-CB1110, with a maximum rated capacity of 60 tons per hour.

(4) One (1) billet hopper, identified as OR-C-06-HP1115, with a maximum storage capacity of 3 tons.
(5) Four (4) billet belt conveyors, identified as OR-C-06-CB1120, OR-C-06-CB2120, OR-C-06-CB1126, and OR-C-06-CB2126, each with a maximum rated capacity of 60 tons per hour.
(6) Two (2) billet vibratory feeders, identified as OR-C-06-VF1125 and OR-C-06-VF2125, each with a rated maximum capacity of 30 tons per hour.
(7) Two (2) trolley car loading stations, collectively identified as OR-C-06-LD1128, each with maximum capacity of 30 tons per hour.
(8) One (1) billet hopper, identified as OR-C-06-HP1135, and five (5) belt conveyors, identified as OR-C-06-CB1150, OR-C-06-CB1160, OR-C-06-CB1170, OR-C-06-CB1180, and OR-C-06-CB1190, each with a rated capacity of 30 tons per hour.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRC1, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB C1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-C-10-SR1010), one (1) cyclone (OR-C-10-CY-1115), and one (1) baghouse (OR-C-10-DC1020), in series, exhausting to stack OR-C-10-ST1025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRC2, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB C2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-C-10-SR2010), one (1) cyclone (OR-C-10-CY-2115), and one (1) baghouse (OR-C-10-DC2020), in series, exhausting to stack OR-C-10-ST2025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(o) One (1) Finish Product Handling and Loading process, approved for construction in 2010, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-C-08-CB1020, OR-C-08-CB1030, OR-C-08-CB2020, and OR-C-08-CB2030, each with a maximum rated capacity of 20 tons per hour.
(2) One (1) Cokonyx belt conveyor, identified as OR-C-08-CD1035, with a maximum rated capacity of 40 tons per hour.

(p) One (1) lime storage silo, identified as LSC, approved for construction in 2010, with a storage capacity of 50 tons of lime, equipped with one (1) dust collector (OR-C-12-DC1006), exhausting to stack OR-C-12-ST1006.

(q) Two (2) diesel-fired emergency generators, identified as EGC1 and EGC2, approved for construction in 2010, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(r) One (1) natural gas-fired emergency generator, identified as EGC3, approved for construction in 2010, with a maximum rated output of 450 kW. Under 40 CFR 60, Subpart

IIII, this is considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

Carbon Alloy Synthesis Plant (CASP) Module D

(a) Raw Material Receiving Handling and Silos D, identified as RMRHSD, approved for construction in 2010, consisting of the following:

(1) One (1) CDD1 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) baghouse (OR-D-01-DC1105), exhausting to stack OR-D-01-ST1105.
(2) One (1) CDD2 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) dust collector (OR-D-01-DC2105), exhausting to stack OR-D-01-ST2105.
(3) Five (5) dry coal storage silos, each with a storage capacity of 240 tons of dried coal, ducted to dedicated baghouses (OR-D-02-DC1070, OR-D-02-DC2070, OR-D-02-DC3070, OR-D-02-DC4070, and OR-D-02-DC5070, respectively), exhausting to stacks OR-D-02-ST1070, OR-D-02-ST2070, OR-D-02-ST3070, OR-D-02-ST4070, and OR-D-02-ST5070, respectively.
(4) Five (5) blend #1 weigh feeders, each with a rated capacity of 40 tons per hour, and one (1) drag conveyor, with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-D-03-DC1105), exhausting to stack OR-D-03-ST1105.
(5) Four (4) blend #1 feed hoppers, with a rated capacity of 30 tons per hour, and two (2) blend #1 hopper feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-D-04-DC1105), exhausting to stack OR-D-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSD facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDD1, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER D1 and FER D2 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-D-01-CY-1305) and one (1) dust collector (OR-D-01-DC1205), in series, exhausting to stack OR-D-01-ST1215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCD1, approved for construction in 2010, with a maximum capacity of 100 tons per hour, ducted to one (1) dust collector (OR-D-02-DC1105), exhausting to stack OR-D-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDD2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER D3 and FER D4 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-D-01-CY-2305) and one (1) dust collector (OR-D-01-DC2205), in series, exhausting to stack OR-D-01-ST2215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCD2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, ducted to one (1) dust collector (OR-D-02-DC2105), exhausting to stack OR-D-02-ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD1, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB D1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-D-09-SR1015), one (1) cyclone (OR-D-09-CY-1025), and one (1) baghouse (OR-D-09-DC1030), in series, exhausting to stack OR-D-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD2, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB D2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-D-09-SR2015), one (1) cyclone (OR-D -09-CY-2025), and one (1) baghouse (OR-D-09-DC2030), in series, exhausting to stack OR-D-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD3, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB D3, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-D-09-SR3015), one (1) cyclone (OR-D-09-CY-3025), and one (1) baghouse (OR-D-09-DC3030), in series, exhausting to stack OR-D-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD4, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB D4, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-D-09-SR4015), one (1) cyclone (OR-D-09-CY-4025), and one (1) baghouse (OR-D-09-DC4030), in series, exhausting to stack OR-D-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM D1- RCLM D4 approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FER D1 - FER D4 consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 0F - 800 0F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB D1 - FERAB D4 respectively.
(2) Four (4) coal tar surge tanks, one (1) per FER.

(k) One (1) Carborec Storage and Blending Area D, identified as CBSBD, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to a baghouse (OR-D-05-DC1205), exhausting to stack OR-D-05-ST1205.
(2) Six (6) weigh feeders, each with a rated capacity of 40 tons per hour, and blend #2 drag conveyors, each with a rated capacity of 75 tons per hour, ducted to a baghouse (OR-D-05-DC1405), exhausting to stack OR-D-05-ST1405.
(3) One (1) Carborec storage silo, with a storage capacity of 240 tons, ducted to a baghouse (OR-D-05-DC6070), exhausting to stack OR-D-05-ST6070.
(4) One (1) blend #2 surge bin, with a storage capacity of 440 tons, ducted to a baghouse (OR-D-06-DC1405), exhausting to stack OR-D-06-ST1405.
(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, each with a rated capacity of 30 tons per hour, billet belt conveyors and one (1) billet roller screener, each with a rated capacity of 80 tons per hour, and one (1) billet fines weigh feeder, with a rated capacity of 10 tons per hour, ducted to a baghouse (OR-D-06-DC1205), exhausting to stack OR-D-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

(l) One (1) billet transfer area, approved for construction in 2010, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-D-06-HP1125, with a maximum rated capacity of 10 tons per hour.
(2) Three (3) billet fines open belt conveyors, identified as OR-D-06-CB1130, OR-D-06-CB1140, and OR-D-06-CB1145, each with a maximum rated capacity of 10 tons per hour.
(3) One (1) billet belt conveyor, identified as OR-D-06-CB1110, with a maximum rated capacity of 60 tons per hour.
(4) One (1) billet hopper, identified as OR-D-06-HP1115, with a maximum storage capacity of 3 tons.
(5) Four (4) billet belt conveyors, identified as OR-D-06-CB1120, OR-D-06-CB2120, OR-D-06-CB1126, and OR-D-06-CB2126, each with a maximum rated capacity of 60 tons per hour.
(6) Two (2) billet vibratory feeders, identified as OR-D-06-VF1125 and OR-D-06-VF2125, each with a rated maximum capacity of 30 tons per hour.
(7) Two (2) trolley car loading stations, collectively identified as OR-D-06-LD1128, each with maximum capacity of 30 tons per hour.
(8) One (1) billet hopper, identified as OR-D-06-HP1135, and five (5) belt conveyors, identified as OR-D-06-CB1150, OR-D-06-CB1160, OR-D-06-CB1170, OR-D-06-CB1180, and OR-D-06-CB1190, each with a rated capacity of 30 tons per hour.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRD1, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB D1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-D-10-SR1010), one (1) cyclone (OR-D-10-CY-1115), and one (1) baghouse (OR-D-10-DC1020), in series, exhausting to stack OR-D-10-ST1025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRD2, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx,

equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB D2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-D-10-SR2010), one (1) cyclone (OR-D-10-CY-2115), and one (1) baghouse (OR-D-10-DC2020), in series, exhausting to stack OR-D-10-ST2025.

(o) One (1) Finish Product Handling and Loading process, approved for construction in 2010, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-D-08-CB1020, OR-D-08-CB1030, OR-D-08-CB2020, and OR-D-08-CB2030, each with a maximum rated capacity of 20 tons per hour.
(2) One (1) Cokonyx belt conveyor, identified as OR-D-08-CD1035, with a maximum rated capacity of 40 tons per hour.

(p) One (1) lime storage silo, identified as LSD, approved for construction in 2010, with a storage capacity of 50 tons of lime, equipped with one (1) dust collector (OR-D-12-DC1006), exhausting to stack OR-D-12-ST1006.

(q) Two (2) diesel-fired emergency generators, identified as EGD1 and EGD2, approved for construction in 2010, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(r) One (1) natural gas-fired emergency generator, identified as EGD3, approved for construction in 2010, with a maximum rated output of 450 kW. Under 40 CFR 60, Subpart IIII, this is considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

<u>CASP Coal Receiving and Handling</u>

(a) Phase 1 CASP C and CASP D coal handling, approved for construction in 2010, consisting of the following:

(1) One (1) feed hopper and conveyor No.1 (PHS1-HC1), with a maximum rated capacity of 100 tons per hour, with emissions uncontrolled.
(2) Two (2) CASP C coal conveyors, identified as PHS1C-C1 and PHS1C-C2, each with a maximum rate of 100 tons per hour, with emissions uncontrolled.
(3) One (1) CASP C coal feed hopper No.2, identified as CASPC-FH2, with a maximum rate of 100 tons per hour, with hopper receiving emissions uncontrolled.
(4) Two (2) CASP D coal conveyors, identified as PHS1D-C1 and PHS1D-C2, each with a maximum rate of 100 tons per hour, with emissions uncontrolled.
(5) One (1) CASP D coal feed hopper No.2, identified as CASPD-FH2, with a maximum rate of 100 tons per hour, with hopper receiving emissions uncontrolled.

(b) Phase 2 CASP coal handling, approved for construction in 2010, consisting of the following:

(1) Two (2) CASP coal conveyors, identified as CASP-C1 and CASP-C2, each with a maximum rate of 100 tons per hour, with emissions uncontrolled.

(2) One (1) CASP rotary stacker CASP-RS1, with a maximum rate of 200 tons per hour, with emissions uncontrolled.

(3) Four (4) CASP coal conveyor feed hoppers No.1, identified as CASPA-FH1, CASPB-FH1, CASPC-FH1, and CASPD-FH1, each with a maximum rate of 100 tons per hour, with emissions uncontrolled.

(4) Two (2) CASP A coal conveyors, identified as CASPA-C1 and CASPA-C2, each with a maximum rated capacity of 100 tons per hour, with emissions uncontrolled.

(5) One (1) CASP A coal feed hopper No.2, identified as CASPA-FH2, with a maximum rate of 100 tons per hour, with hopper receiving emissions uncontrolled.

(6) Two (2) CASP B coal conveyors, identified as CASPB-C1 and CASPB-C2, each with a maximum rated capacity of 100 tons per hour, with emissions uncontrolled.

(7) One (1) CASP B coal feed hopper No.2, identified as CASPB-FH2, with a maximum rate of 100 tons per hour, with hopper receiving emissions uncontrolled.

(8) Two (2) CASP C coal conveyors, identified as CASPC-C1 and CASPC-C2, each with a maximum rated capacity of 100 tons per hour, with emissions uncontrolled.

(9) Two (2) CASP D coal conveyors, identified as CASPD-C1 and CASPD-C2, each with a maximum rated capacity of 100 tons per hour, with emissions uncontrolled.

Under 40 CFR 60, Subpart Y, the CASP Raw Material Receiving and Handling facilities are considered coal processing and conveying equipment, and coal storage systems.

(c) Storage Piles

(1) One (1) PHS1 intermediate coal storage pile No. 1, with a storage capacity of 0.25 acres.
(2) Four (4) PHS1 coal storage piles, with a combined storage capacity of 3.6 acres.
(3) One (1) PHS1 intermediate coal storage pile No. 2, with a storage capacity of 0.25 acres.
(4) Four (4) CASP coal storage piles, with a combined a storage capacity of 3.6 acres.

Under 40 CFR 60, Subpart Y, these storage piles are each considered open storage piles.

<u>CASP Cokonyx Loadout</u>

(a) Two (2) single deck vibratory screener feeders for CASP A, identified as CASPA-VF1 and CASPA-VF2, approved for construction in 2010, each with a maximum rated capacity of 20 tons per hour, with emissions uncontrolled.

(b) Two (2) single deck vibratory screener feeders for CASP B, identified as CASPB-VF1 and CASPB-VF2, approved for construction in 2010, each with a maximum rated capacity of 20 tons per hour, with emissions uncontrolled.

(c) Two (2) single deck vibratory screener feeders for CASP C, identified as CASPC-VF1 and CASPC-VF2, approved for construction in 2010, each with a maximum rated capacity of 20 tons per hour, with emissions uncontrolled.

(d) Two (2) single deck vibratory screener feeders for CASP D, identified as CASPD-VF1 and CASPD-VF2, approved for construction in 2010, each with a maximum rated capacity of 20 tons per hour, with emissions uncontrolled.

(e) Two (2) emergency product by-pass bunkers for CASP A, identified as CASPA-EB1 and CASPA-EB2, approved for construction in 2010, with emissions uncontrolled.

(f) Two (2) emergency product by-pass bunkers for CASP B, identified as CASPB-EB1 and CASPB-EB2, approved for construction in 2010, with emissions uncontrolled.

(g) Two (2) emergency product by-pass bunkers for CASP C, identified as CASPC-EB1 and CASPC-EB2, approved for construction in 2010, with emissions uncontrolled.

(h) Two (2) emergency product by-pass bunkers for CASP D, identified as CASPD-EB1 and CASPD-EB2, approved for construction in 2010, with emissions uncontrolled.

(i) Two (2) Cokonyx loadout conveyors for CASP A, identified as CKNXC-A1 and CKNXC-A2, approved for construction in 2010, each with a maximum capacity of 20 tons of Cokonyx per hour, with emissions uncontrolled.

(j) Two (2) Cokonyx loadout conveyors for CASP B, identified as CKNXC-B1 and CKNXC-B2, approved for construction in 2010, each with a maximum capacity of 20 tons of Cokonyx per hour, with emissions uncontrolled.

(k) Two (2) Cokonyx loadout conveyors for CASP C, identified as CKNXC-C1 and CKNXC-C2, approved for construction in 2010, each with a maximum capacity of 20 tons of Cokonyx per hour, with emissions uncontrolled.

(l) Two (2) Cokonyx loadout conveyors for CASP D, identified as CKNXC-D1 and CKNXC-D2, approved for construction in 2010, each with a maximum capacity of 20 tons of Cokonyx per hour, with emissions uncontrolled.

(m) One (1) C/D Cokonyx conveyor, identified as CKNXC-C/D, approved for construction in 2010, with a maximum capacity of 57 tons of Cokonyx per hour, with emissions uncontrolled.

(n) One (1) A/B Cokonyx conveyor, identified as CKNXC-A/B, approved for construction in 2010, with a maximum capacity of 57 tons of Cokonyx per hour, with emissions uncontrolled.

(o) Two (2) C/D Cokonyx surge bins, collectively identified as CKNXBin-C/D1, approved for construction in 2010, with a maximum capacity of 147 tons per bin, with emissions uncontrolled.

(p) Two (2) A/B Cokonyx surge bins, collectively identified as CKNXBin-A/B1, approved for construction in 2010, with a maximum storage capacity of 147 tons per silo, with emissions uncontrolled.

(q) Storage Piles

(1) CASP A/B Cokonyx Emergency Storage Pile, with a storage capacity of 0.02 acres.

(2) CASP C/D Cokonyx Emergency Storage Pile, with a storage capacity of 0.02 acres.

Specifically Regulated Insignificant Activities (Carbon Alloy Synthesis Plants):

CASP Module A

(1) One (1) lubricating oil storage tank, identified as STO3 A, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 A, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT A1 and PFRCT A2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPA, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 60, Subpart IIII, this is considered a fire pump stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

(5) One (1) coal tar storage tank, identified as STO1 A, approved for construction in 2010, with a storage capacity of 10,000 gallons.

CASP Module B

(1) One (1) lubricating oil storage tank, identified as STO3 B, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 B, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT B1 and PFRCT B2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPB, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 60, Subpart IIII, this is considered a fire pump stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

(5) Two (2) coal tar storage tanks, identified as STO1 B and STO2 B, approved for construction in 2010, each with a storage capacity of 10,000 gallons.

CASP Module C

(1) One (1) lubricating oil storage tank, identified as STO3 C, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 C, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT C and PFRCT C2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPC, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 60, Subpart IIII, this is

considered a fire pump stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

(5) Two (2) coal tar storage tanks, identified as STO1 C and STO2 C, approved for construction in 2010, each with a storage capacity of 10,000 gallons.

CASP Module D

(1) One (1) lubricating oil storage tank, identified as STO3 D, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 D, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT D1 and PFRCT D2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPD, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 60, Subpart IIII, this is considered a fire pump stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

(5) One (1) coal tar storage tank, identified as STO1 D, approved for construction in 2010, with a storage capacity of 10,000 gallons.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).

2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

This significant source modification authorizes construction of the new emission units. Operating conditions shall be incorporated into the Part 70 Operating Permit as a significant permit modification in

accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12. Operation is not approved until the significant permit modification has been issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, and ask for Jenny Acker or extension 3-9327, or dial (317) 233-9327.

Sincerely,

Chrystal A. Wagner, Section Chief
Permits Branch
Office of Air Quality

Attachments
Draft Significant Source Modification No. 089-28848-00121
Technical Support Document (TSD)

JLA

cc: File - Lake County
Lake County Health Department
Northwest Regional Office

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

U.S. Steel - Gary Works
One North Broadway
Gary, Indiana 46402

(herein known as the Permittee) is hereby authorized to construct subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.
This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.
This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-7-10.5, applicable to those conditions

Significant Source Modification No.: 089-28848-00121	
Issued by: Chrystal A. Wagner, Section Chief Permits Branch Office of Air Quality	Issuance Date: August 4,2010

TABLE OF CONTENTS

SECTION A SOURCE SUMMARY 15

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)] 15
A.2 Part 70 Source Definition [326 IAC 2-7-1(22)] 15
A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)] 16
A.4 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)] 52
A.5 Part 70 Permit Applicability [326 IAC 2-7-2] 57

SECTION B GENERAL CONDITIONS 58

B.1 Definitions [326 IAC 2-7-1] 58
B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)] 58
B.3 Term of Conditions [326 IAC 2-1.1-9.5] 58
B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12] 58
B.5 Severability [326 IAC 2-7-5(5)] 58
B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)] 58
B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)] 58
B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)] 59
B.9 Annual Compliance Certification [326 IAC 2-7-6(5)] 59
B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)][326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3] 60
B.11 Emergency Provisions [326 IAC 2-7-16] 60
B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12] 62
B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5] 63
B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)] 63
B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9] 63
B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)] 64
B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12] [40 CFR 72] 64
B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)] 65
B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5] 65
B.20 Source Modification Requirement [326 IAC 2-7-10.5] 66
B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2] 66
B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11] 67
B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7] 67
B.24 Advanced Source Modification Approval [326 IAC 2-7-5(16)] [326 IAC 2-7-10.5] 68
B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6] 68

SECTION C SOURCE OPERATION CONDITIONS 69

Emission Limitations and Standards [326 IAC 2-7-5(1)] 69
C.1 Opacity [326 IAC 5-1] 69
C.2 Open Burning [326 IAC 4-1] [IC 13-17-9] 69
C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2] 69
C.4 Fugitive Dust Emissions [326 IAC 6-4] 69
C.5 Fugitive Dust Emissions [326 IAC 6.8-10-3] 69
C.6 Stack Height [326 IAC 1-7] 70
C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M] ... 71

Testing Requirements [326 IAC 2-7-6(1)] 72
C.8 Performance Testing [326 IAC 3-6] 72
C.9 Sulfur Fuel Sampling and Analysis (Entire Source) [326 IAC 7-4.1-2] 72

Compliance Requirements [326 IAC 2-1.1-11] 73
C.10 Compliance Requirements [326 IAC 2-1.1-11] 73

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)] 73
C.11 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)] 73
C.12 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)] 73
C.13 Continuous Compliance Plan (CCP) [326 IAC 6.8-8-1] [326 IAC 6.8-8-8] 74
C.14 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63] 74
C.15 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)] 74

Corrective Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] 74
C.16 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3] 74
C.17 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68] 75
C.18 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6] 75
C.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6] 75

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] 76
C.20 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6] 76
C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3] 76
C.22 Sulfur Record keeping Requirements (Entire Source) [326 IAC 7-4.1-20(c)(1)] 77
C.23 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2][326 IAC 2-3] 78
C.24 Sulfur Dioxide (SO2) Reporting Requirements (Entire Source) [326 IAC 7-4.1-20(c)(2)] 79

Stratospheric Ozone Protection 80
C.25 Compliance with 40 CFR 82 and 326 IAC 22-1 80

SECTION D.1 FACILITY OPERATION CONDITIONS 81

Emission Limitations and Standards [326 IAC 2-7-5(1)] 81
D.1.1 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38] [326 IAC 11-3-2(a)] 81
D.1.2 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3] 82
D.1.3 Coke Oven Batteries Emission Limitations - Precarbonization [326 IAC 6.8-9-3(a)(9)(A)] [326 IAC 11-3-2(a)(1)] 83
D.1.4 Opacity Limitations [326 IAC 6.8-9-3(a)(9)(B)] 83
D.1.5 Coke Oven Batteries Opacity Limitations [326 IAC 11-3-2(a)(2)] 83
D.1.6 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A] 83
D.1.7 New Source Performance Standards - Opacity Limitations Coal Preparation Plant [326 IAC 12-1][40 CFR 60 Subpart Y] 83
D.1.8 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20(c)(3)] 83
D.1.9 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10/NOx/SO2/CO/VOC [326 IAC 2-2] Nonattainment New Source Review (NSR) Minor Limit PM2.5/SO2 [326 IAC 2-1.1-5] 83
D.1.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)] 84

Compliance Determination Requirements 84
D.1.11 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11] 84
D.1.12 Particulate Matter Control 85

Compliance Monitoring Requirements 85
D.1.13 Nos. 2 and 3 Precarbonization [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] 85

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] 85
D.1.14 Record Keeping Requirements 85

D.1.15 Reporting Requirements 85

SECTION D.2 OPERATION CONDITIONS 86

Emission Limitations and Standards [326 IAC 2-7-5(1)] 88
D.2.1 General Provisions relating to National Emission Standards for Hazardous Air Pollutant (NESHAP) [326 IAC 20-3][40 CFR Part 63, Subpart A] [40 CFR 63 Subpart L] [Table 1of 40 CFR 63 Subpart CCCCC] 88
D.2.2 National Emission Standards for Hazardous Air Pollutants (NESHAP)- Coke Oven Batteries [326 IAC 20-3] [40 CFR Part 63, Subpart L] 88
D.2.3 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38] [326 IAC 6.8-9-3(a)(8)] [326 IAC 11-3-2(i)] 96
D.2.4 Lake County PM_{10} Coke Battery Emission Requirements [326 IAC 6.8-9] The Coke Batteries Nos. 2, 3, 5 and 7 shall comply with the following: 96
D.2.5 Emission Limitations for Coke Oven Batteries [326 IAC 11-3-2] 98
D.2.6 Coke Oven Identification [326 IAC 11-3-3] 99
D.2.7 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20] [326 IAC 11-3-2(i)] 99
D.2.8 Nitrogen Oxide (NO_X) Limitations PSD [326 IAC 2-2] and Emissions Offsets [326 IAC 2-3] 99
D.2.9 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10/NOx/SO2/CO/VOC [326 IAC 2-2] Nonattainment New Source Review (NSR) Minor Limit PM2.5/SO2 [326 IAC 2-1.1-5] 100
D.2.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)] 100

Compliance Determination Requirements 100
D.2.11 National Emission Standards for Hazardous Air Pollutants from Coke Oven Batteries - Visible Emissions Inspection Requirements [40 CFR 63.309][326 IAC 20] 100
D.2.12 Visible Emission Inspections for Charging [326 IAC 11-3-4(a)] 103
D.2.13 Charge Port Lids and Off take Piping - Emissions Testing [326 IAC 11-3-4(b)] 104
D.2.14 Visible Emissions for Oven Doors [326 IAC 11-3-4(c)] 104
D.2.15 Visible Emissions Inspections for Gas Collector Main [326 IAC 11-3-4(e)] 105
D.2.16 Visible Emissions Inspections Pushing [326 IAC 6.8-9-3(a)(3)] 105
D.2.17 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] 105
D.2.18 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2)] 106
D.2.19 Particulate Matter Control [326 IAC 2-7-6(6)] 106

Compliance Monitoring Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)] 106
D.2.20 Visible Emissions Notations 106
D.2.21 Parametric Monitoring 107
D.2.22 Continuous Opacity Monitoring (COM) [326 IAC 3-5] 107
D.2.23 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)] ... 107

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] 108
D.2.24 National Emission Standards for Hazardous Air Pollutants from Coke Oven Batteries - Record Keeping and Reporting Requirements [40 CFR 63.311][326 IAC 20] 108
D.2.25 Record Keeping Requirements 109
D.2.26 Reporting Requirements 109
D.2.27 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Coke Ovens: Pushing, Quenching and Battery Stacks [40 CFR 63, Subpart CCCCC] 110

SECTION D.3 FACILITY OPERATION CONDITIONS 135

Emission Limitations and Standards [326 IAC 2-7-5(1)] 137
D.3.1 General Provisions Relating to Emission Standards for Hazardous Air Pollutants (NESHAP) [326 IAC 14] [40 CFR Part 61 Subpart A] 137
D.3.2 National Emission Standard for Hazardous Air Pollutants (NESHAP)-Benzene Limitations from Coke Byproduct Recovery Plants [40 CFR 61 Subpart L] [326 IAC 14] 138

D.3.3 National Emission Standard for Hazardous Air Pollutants (NESHAP) - Coke Byproduct Recovery Plants Equipment Leaks [326 IAC 14] [40 CFR 61 Subpart V] 141
D.3.4 National Emission Standard for Hazardous Air Pollutants (NESHAP) - Benzene Waste Operations [40 CFR Part 61, Subpart FF] [326 IAC 14] 143
D.3.5 Particulate Emissions Limitations [326 IAC 6.8-1-2(a)] 144
D.3.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)] 144

Compliance Determination Requirements 144
D.3.7 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Coke By-product Recovery Plant: Benzene Compliance Requirements [40 CFR 61, Subpart L][326 IAC 14] 144
D.3.8 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Coke By-product Recovery Plant: Monitoring Procedures for Equipment Leaks [40 CFR 61, Subpart V] [326 IAC 14] 144
D.3.9 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Coke By-product Recovery Plant Leak Detection Testing Requirements [40 CFR 61, Subpart V] [326 IAC 14] 148
D.3.10 National Emission Standards for Hazardous Air Pollutants (NESHAP)- Benzene Waste Operations Methods, Procedures and Compliance [40 CFR 61, Subpart FF] [326 IAC 14] 148

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19][40 CFR 61] 150
D.3.11 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Coke By-product Recovery Plant –Benzene Record Keeping Requirements [40 CFR 61 Subpart L] [326 IAC 14] 150
D.3.12 National Emission Standards for Hazardous Air Pollutants (NESHAP)- Coke Byproduct Recovery Plant Record Keeping Requirements for- Equipment Leaks [40 CFR 61, Subpart V] [326 IAC 14] 150
D.3.13 National Emission Standards for Hazardous Air Pollutants (NESHAP) -Benzene Waste Operations -Record Keeping Requirements [40 CFR 61, Subpart FF] [326 IAC 14] 152
D.3.14 National Emission Standards for Hazardous Air Pollutants (NESHAP) -Coke Byproduct Recovery Plant - Benzene Reporting Requirements [40 CFR 61 Subpart L][326 IAC 14] 153
D.3.15 National Emission Standards for Hazardous Air Pollutants (NESHAP) Coke Byproduct Recovery Plant - Equipment Leaks Reporting Requirements [40 CFR 61, Subpart V] [326 IAC 14] 154
D.3.16 National Emission Standards for Hazardous Air Pollutants (NESHAP) Benzene Waste Operations Reporting Requirements [40 CFR 61, Subpart FF] [326 IAC 14]..... 154

SECTION D.4 FACILITY OPERATION CONDITIONS 156

Emission Limitations and Standards [326 IAC 2-7-5(1)] 156
D.4.1 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38] 156
D.4.2 Sulfur Dioxide (SO_2) Emissions Limitations [326 IAC 7-4.1-20] 156
D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)] 156

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] 157
D.4.4 Record Keeping Requirements 157
D.4.5 Reporting Requirements 157

SECTION D.5 FACILITY OPERATION CONDITIONS 158

Emission Limitations and Standards [326 IAC 2-7-5(1)] 158
D.5.1 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38] [326 IAC 6.8-1-2(b)] 158
D.5.2 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20] 159
D.5.3 Nonattainment NSR Minor Limits [326 IAC 2-1.1-5] 160

D.5.4 PSD Minor Limits [326 IAC 2-2] 160
D.5.5 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A] 161
D.5.6 NO_X Emissions [326 IAC 12-1][40 CFR 60, Subpart Db] 161
D.5.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)] 161

Compliance Determination Requirements 161
D.5.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [326 IAC 2-1.1-5] [40 CFR 60, Subpart Db] 161
D.5.9 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2] 161
D.5.10 Particulate Matter Control 161

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] 161
D.5.11 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 12] [40 CFR 60, Subpart Db] [326 IAC 2-7-6(1),(6)] 161

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19] 161
D.5.12 Record Keeping Requirements 161
D.5.13 Reporting Requirements 162
D.5.14 Natural Gas Fired Boiler Certification 162

SECTION D.6 FACILITY OPERATION CONDITIONS 163

Emission Limitations and Standards [326 IAC 2-7-5(1)] 163
D.6.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants (HAPs): [326 IAC 20-1][40 CFR 63, Subpart A] [Table 4 to 40 CFR 63, Subpart FFFFF] 163
D.6.2 Particulate Emissions Offset [326 IAC 2-3] 163
D.6.3 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38] 164
D.6.4 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20] 164
D.6.5 Volatile Organic Compounds (VOC) Limitations [326 IAC 8-13-3] 164
D.6.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)] 166

Compliance Determination Requirements 166
D.6.7 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11] 166
D.6.8 Particulate Matter Control 167

Compliance Monitoring Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)] 167
D.6.9 Visible Emissions Notations 167
D.6.10 Parametric Monitoring 168
D.6.11 Scrubber Failure Detection 168
D.6.12 Continuous Emissions Monitoring (VOC)[326 IAC 8-13-8][326 IAC 3-5] 169
D.6.13 VOC Monitoring Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)] 169

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] 169
D.6.14 General Record Keeping Requirements 169
D.6.15 General Reporting Requirements 170

National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel manufacturing [40 CFR 63, Subpart FFFFF] 171
D.6.16 National Emission Standards for Hazardous Air Pollutants (HAPs): Integrated iron and Steel Manufacturing – Sinter Plants [40 CFR 63, Subpart FFFFF] 171

Section D.7 Facility Operation Conditions 197

Emission Limitations and Standards [326 IAC 2-7-5(1)] 199
D.7.1 Emission Offset Minor Limitation [326 IAC 2-3] 199
D.7.2 PSD Minor Limit PM/PM_{10} [326 IAC 2-2] 199

D.7.3 Nonattainment New Source Review (NSR) Minor Limit [326 IAC 2-1.1-5] 199
D.7.4 Particulate Emission Limitation [326 IAC 6.8-1-2(a)] 200
D.7.5 General Provisions Relating to Hazardous Air Pollutants (HAPs) [326 IAC 20-1][40 CFR 63, Subpart A] [Table 4 to 40 CFR 63, Subpart FFFFF] 200
D.7.6 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38] 200
D.7.7 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3] 200
D.7.8 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20(a)(1)(I)(J) and (K) 201
D.7.9 Carbon Monoxide (CO) Limitations [326 IAC 9-1-2(2)] 202
D.7.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)] 202

Compliance Determination Requirements 202
D.7.11 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11] 202
D.7.12 Sulfur Fuel Sampling and Analysis [326 IAC 7-4-1.1(d)] 203
D.7.13 Particulate Matter and CO Control [326 IAC 2-7-6(6)] 203
D.7.14 Fugitive Dust Control 204

Compliance Monitoring Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)] 204
D.7.15 Visible Emissions Notations 204
D.7.16 Parametric Monitoring 204

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] 205
D.7.17 General Record Keeping Requirements 205
D.7.18 General Reporting Requirements 205
D.7.19 Actual to Projected Actual Applicability Test [326 IAC 2-2-2(d)] [326 IAC 2-2-3(c)] 205
D.7.20 Volatile Organic Compounds (VOC) De Minimis [326 IAC 2-3-2(b)] 206

National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel manufacturing [40 CFR 63, Subpart FFFFF] 207
D.7.21 National Emissions Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel Manufacturing - Blast Furnaces [40 CFR 63, Subpart FFFFF] 207

SECTION D.8 FACILITY OPERATION CONDITIONS 228

Emission Limitations and Standards [326 IAC 2-7-5(1)] 229
D.8.1 General Provisions Relating to Hazardous Air Pollutants (HAPs) [326 IAC 20-1][40 CFR 63, Subpart A] [Table 4 to 40 CFR 63, Subpart FFFFF] 229
D.8.2 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38] 229
D.8.3 Particulate Emissions Limitations [326 IAC 6.8-1-2(a)] 229
D.8.4 Lake County Opacity Limitations [326 IAC 6.8-3-4] 229
D.8.5 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20(c)(3)] 230
D.8.6 Sulfur Dioxide (SO_2) Limitations Hot Metal Transfer and Desulfurization Stations [326 IAC 7-4.1-20] 230
D.8.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)] 230

Compliance Determination Requirements 230
D.8.8 Particulate Matter Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11] 230
D.8.9 Sulfur Dioxide Testing Requirements 231
D.8.10 Particulate Matter Control [326 IAC 2-7-6(6)] 231

Compliance Monitoring Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)] 232
D.8.11 Visible Emissions Notations 232
D.8.12 Parametric Monitoring 232
D.8.13 Scrubber Failure Detection 233

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] 233
D.8.14 General Record Keeping Requirements 233

National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel manufacturing [40 CFR 63, Subpart FFFFF] 234
D.8.15 National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel manufacturing – Basic Oxygen Process Furnaces (BOPF) [40 CFR 63, Subpart FFFFF] 234

SECTION D.9 FACILITY OPERATION CONDITIONS 257

Emission Limitations and Standards [326 IAC 2-7-5(1)] 258
D.9.1 General Provisions Relating to Hazardous Air Pollutants (HAPs) [326 IAC 20-1][40 CFR 63, Subpart A] [Table 4 to 40 CFR 63, Subpart FFFFF] 258
D.9.2 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38] 258
D.9.3 Particulate Emissions Limitations [326 IAC 6.8-1-2(a)] 259
D.9.4 Lake County Opacity Limitations [326 IAC 6.8-3-4] 259
D.9.5 Sulfur Dioxide (SO_2) Limitations [326 IC 7-4.1-20(c)(3)] 260
D.9.6 Sulfur Dioxide (SO_2 Limitations – Hot Metal Transfer and Desulfurization Stations [326 IAC 7-4.1-20] 260
D.9.7 Carbon Monoxide (CO) Limitations 326 IAC 9-1-2 260
D.9.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)] 261

Compliance Determination Requirements 261
D.9.9 Particulate Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11] 261
D.9.10 Sulfur Dioxide (SO_2) Testing Requirements 261
D.9.11 Particulate Matter Control [326 IAC 2-7-6(6)] 262
D.9.12 Carbon Monoxide (CO) Control 262

Compliance Monitoring Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)] 262
D.9.13 Visible Emissions Notations 262
D.9.14 Parametric Monitoring 263
D.9.15 Scrubber Failure Detection 264

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] 264
D.9.16 General Record Keeping Requirements 264

National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel manufacturing [40 CFR 63, Subpart FFFFF] 265
D.9.17 National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel manufacturing – Basic Oxygen Process Furnaces (BOPF) [40 CFR 63, Subpart FFFFF] 265

SECTION D.10 FACILITY OPERATION CONDITIONS 288

Emission Limitations and Standards [326 IAC 2-7-5(1)] 288
D.10.1 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38] 288
D.10.2 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20] 288
D.10.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)] 289

Compliance Determination Requirements 289
D.10.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11] 289
D.10.5 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2] 290

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] 290
D.10.6 Record Keeping Requirements 290
D.10.7 Reporting Requirements 290

SECTION D.11 FACILITY OPERATION CONDITIONS 291

Emission Limitations and Standards [326 IAC 2-7-5(1)] 291
D.11.1 General Provisions Relating to Hazardous Air Pollutants (HAPs) [326 IAC 20-1-1][40 CFR Part 63, Subpart A] 291
D.11.2 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Steel Pickling - HCl Process Facilities and Hydrochloric Acid Regeneration Plants [40 CFR Part 63, Subpart CCC][40 CFR 63.1157] 291
D.11.3 National Emission Standard for Hazardous Air Pollutants (NESHAP) Maintenance Requirements [40 CFR 63.1160] 291
D.11.4 National Emission Standards for Hazardous Air Pollutants (NESHAP) Operational and Equipment Standards [40 CFR 63.1159, Subpart CCC] Hydrochloric acid storage vessels. 292
D.11.5 Particulate (PM) Limitation [326 IAC 6.8-1-2(a)] 292

Compliance Determination Requirements 292
D.11.6 Testing Requirements [40 CFR 63.1161, Subpart CCC] 292

Compliance Monitoring Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)] 294
D.11.7 National Emission Standards for Hazardous Air Pollutants (NESHAP) Monitoring Requirements [40 CFR 63.1162, Subpart CCC] 294
D.11.8 Monitoring Requirements [40 CFR 63.1162] 294

Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] 294
D.11.9 Record Keeping Requirements [40 CFR Part 63.1165] 294
D.11.10 Reporting Requirements [40 CFR 63.1164] 296

SECTION D.12 FACILITY OPERATION CONDITIONS 298

Emission Limitations and Standards [326 IAC 2-7-5(1)] 299
D.12.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A] 299
D.12.2 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38] 299
D.12.3 Particulate Emissions Limitations [326 IAC 6.8-1-2(a)] 299
D.12.4 Nitrogen Dioxide (NO_X) Emissions Offset Limitations [326 IAC 2-3] 299
D.12.5 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20(c)(3)] 299
D.12.6 Preventative Maintenance Plan [326 IAC 2-7-5(13)] 299

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] 300
D.12.7 Record Keeping Requirements 300
D.12.8 Reporting Requirements 300

SECTION D.13 FACILITY OPERATION CONDITIONS 301

Emission Limitations and Standards [326 IAC 2-7-5(1)] 302
D.13.1 Particulate Emissions Limitations [326 IAC 6.8-1-2(a)] 302
D.13.2 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20(c)(3)] 302

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] 302
D.13.3 Record Keeping Requirements 302

SECTION D.14 FACILITY OPERATION CONDITIONS 303

Emission Limitations and Standards [326 IAC 2-7-5(1)] 303
D.14.1 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38] 303
D.14.2 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20] 303
D.14.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)] 304

Compliance Determination Requirements **304**
D.14.4 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2] 304

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] **304**
D.14.5 Visible Emission Notations 304

Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] **305**
D.14.6 Record Keeping Requirements 305
D.14.7 Reporting Requirements 305
D.14.8 Natural Gas Fired Boiler Certification 305

SECTION D.15 FACILITY OPERATION CONDITIONS **306**

Emission Limitations and Standards [326 IAC 2-7-5(1)] **306**
D.15.1 General Provisions Relating to New Source Performance Standards (NSPS) [326 IAC 12-1][40 CFR 60, Subpart A] 306
D.15.2 New Source Performance Standards (NSPS) Particulate Limitations [326 IAC 12] [40 CFR 60, Subpart D] 306
D.15.3 Lake County PM_{10} Emissions Requirements [326 IAC 6.8-2-38] 306
D.15.4 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20] 307
D.15.5 PSD Nitrogen Oxides (NO_X) Emission Offset Limitations [326 IAC 2-2] [326 IAC 2-3] .. 309
D.15.6 Nitrogen Oxides (NO_X) Limitations [326 IAC 12][40 CFR Part 60, Subpart D and Subpart Db] 309
D.15.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)] 310

Compliance Determination Requirements **310**
D.15.8 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11] 310
D.15.9 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2] 310
D.15.10 Nitrogen Oxide (NO_X) Emissions Monitoring for No. 4A Boiler [40 CFR 60.48b] 310

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] **311**
D.15.11 Visible Emission Notations 311

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] **311**
D.15.12 Record Keeping Requirements 311
D.15.13 Reporting Requirements 312
D.15.14 Natural Gas Fired Boiler Certification 312

SECTION D.16 FACILITY OPERATION CONDITIONS **313**

Emission Limitations and Standards [326 IAC 2-7-5(1)] **313**
D.16.1 Particulate Matter (PM) Lake County Fugitive Dust Limits [326 IAC 6.8-10-4] 313

Compliance Determination Requirements **313**
D.16.2 Particulate Matter Control 313

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19] **315**
D.16.3 Record Keeping Requirements 315
D.16.4 Reporting Requirements 316

Section D.17 FACILITY OPERATION CONDITIONS **317**

Emission Limitations and Standards **320**
D.17.1 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3] 320
D.17.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2 (Cold Cleaner Degreaser Operation)] 321
D.17.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)] 321

D.17.6 Volatile Organic Compounds (VOC) [326 IAC 8-3-8] (Material requirements for cold cleaning degreasers) 322
D.17.7 Volatile Organic Liquid Storage Vessels [326 IAC 8-9-1] 323

Section D.18 FACILITY OPERATION CONDITIONS 324

Emission Limitations and Standards 327
D.18.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10/NOx/SO2/CO/VOC [326 IAC 2-2] Nonattainment New Source Review (NSR) Minor Limit PM2.5/SO2 [326 IAC 2-1.1-5] 327
D.18.1.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10 [326 IAC 2-2] Nonattainment New Source Review (NSR) Minor Limit PM2.5/SO2 [326 IAC 2-1.1-5] 329
D.18.2 Particulate Emission Limitation [326 IAC 6.8-1-2(a)] 329
D.18.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)] 329

Compliance Determination Requirements 329
D.18.7 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11] 330

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] 331
D.18.8 Feed Enhancement Reactor Afterburner and Particle Fusion Reactor Afterburner Temperature Monitoring 331
D.18.9 Coal Tar Reclaimer Temperature Monitoring 332

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19] 334
D.18.15 Record Keeping Requirements 334

Section D.19 FACILITY OPERATION CONDITIONS 335

Emission Limitations and Standards 339
D.19.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10 [326 IAC 2-2] Nonattainment New Source Review (NSR) Minor Limit PM2.5 [326 IAC 2-1.1-5] 339
D.19.1.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10 [326 IAC 2-2] Nonattainment New Source Review (NSR) Minor Limit PM2.5/SO2 [326 IAC 2-1.1-5] 342
D.19.2 Particulate Emission Limitation [326 IAC 6.8-1-2(a)] 342
D.19.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)] 342

Compliance Determination Requirements 342
D.19.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11] 342

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] 345

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19] 346
D.19.9 Record Keeping Requirements 346

Section D.20 FACILITY OPERATION CONDITIONS 348

Emission Limitations and Standards 351
D.20.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10 [326 IAC 2-2] Nonattainment New Source Review (NSR) Minor Limit PM2.5 [326 IAC 2-1.1-5] 351
D.20.1.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10 [326 IAC 2-2] Nonattainment New Source Review (NSR) Minor Limit PM2.5/SO2 [326 IAC 2-1.1-5] 356
D.20.2 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3] 356
D.20.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)] 357

Compliance Determination Requirements 357
D.20.4 Particulate Matter Control 357

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19] 359
D.20.5 Record Keeping Requirements 359
D.20.6 Reporting Requirements 360

Section D.21 FACILITY OPERATION CONDITIONS 362

Emission Limitations and Standards 364
D.21.1 Particulate Emission Limitation [326 IAC 6.8-1-2(a)] 364
D.21.2 Volatile Organic Liquid Storage Vessels [326 IAC 8-9-1] 364

SECTION E.1 FACILITY OPERATION CONDITIONS 365

Emission Limitations and Standards [326 IAC 2-7-5(1)] 365
E.1.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A] 365
E.1.2 NSPS Coal Preparation Plant [326 IAC 12-1][40 CFR 60 Subpart Y] 365
E.1.3 PSD Minor Limit (NO_X) [326 IAC 2-2] 365
E.1.4 PM and PM_{10} Minor Limits [326 IAC 2-2][326 IAC 2-1.1-5] 365
E.1.5 Particulate Limitations [326 IAC 6.8-1-2(a)] 366
E.1.6 Preventive Maintenance Plan 366

Compliance Determination Requirements 366
E.1.7 Testing Requirements 366
E.1.8 NSPS Coal Preparation Plant [40 CFR 60.245] 366
E.1.9 Particulate Matter Control [326 IAC 2-7-6(6)] 367

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] 367
E.1.10 NSPS Coal Preparation Monitoring Requirements [40 CFR 60.254] 367
E.1.11 Visible Emissions Notations 367
E.1.12 Parametric Monitoring 368

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] 368
E.1.13 Record Keeping Requirements 368
E.1.14 Reporting Requirements 368

SECTION E.2 Facility Operation Conditions 369

Emission Limitations and Standards [326 IAC 2-7-5(1)] 369
E.2.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A] 369
E.2.2 NSPS Coal Preparation Plant [326 IAC 12-1][40 CFR 60 Subpart Y] 369
E.2.3 PM and PM_{10} Minor Limits [326 IAC 2-2][326 IAC 2-1.1-5] 369
E.2.4 Particulate Limitations [326 IAC 6.8-1-2(a)] 369
E.2.5 Preventive Maintenance Plan 370

Compliance Determination Requirements 370
E.2.6 NSPS Coal Preparation Plant [40 CFR 60.245] 370
E.2.7 Testing Requirements 370
E.2.8 Particulate Control 370

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] 370
E.2.9 Record Keeping Requirements 370

SECTION E.3 FACILITY OPERATION CONDITIONS 371

Emission Limitations and Standards [326 IAC 2-7-5(1)] 371
E.3.1 PSD Minor Limit (NO_X) [326 IAC 2-2] 371
E.3.2 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3] 371
E.3.3 Preventive Maintenance Plan 372

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] 372
E.3.4 Record Keeping Requirements 372
E.3.5 Reporting Requirements 372

SECTION E.4 FACILITY OPERATION CONDITIONS 373

Emission Limitations and Standards [326 IAC 2-7-5(1)] 374
E.4.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A] 374
E.4.2 NSPS Coal Preparation Plant [326 IAC 12-1][40 CFR 60 Subpart Y] 374
E.4.3 PM and PM_{10} Minor Limits [326 IAC 2-2][326 IAC 2-1.1-5] 374
E.4.4 Particulate Limitations [326 IAC 6.8-1-2(a)] 374
E.4.5 Preventive Maintenance Plan 374

Compliance Determination Requirements 374
E.4.6 NSPS Coal Preparation Plants [40 CFR 60.254] 374
E.4.7 Testing Requirements 375
E.4.8 Particulate Control 376
E.4.9 Fugitive Dust Control 376

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] 376
E.4.10 Record Keeping Requirements 376

SECTION E.5 FACILITY OPERATION CONDITIONS 377

Emission Limitations and Standards [326 IAC 2-7-5(1)] 377
E.5.1 Volatile Organic Compounds (VOC) [326 8-3-5] 377
E.5.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-8] (Material require¬ments for cold cleaning degreasers) 378
E.5.3 Volatile Organic Liquid Storage Vessels [326 IAC 8-9-1] 379

SECTION F Nitrogen Oxides Budget Trading Program - NO_X Budget Permit for NO_X Budget Units Under 326 IAC 10-4-1(a) 380

F.1 Automatic Incorporation of Definitions [326 IAC 10-4-7(e)] 380
F.2 Standard Permit Requirements [326 IAC 10-4-4(a)] 380
F.3 Monitoring Requirements [326 IAC 10-4-4(b)] 381
F.4 Nitrogen Oxides Requirements [326 IAC 10-4-4(c)] 381
F.5 Excess Emissions Requirements [326 IAC 10-4-4(d)] 382
F.6 Record Keeping Requirements [326 IAC 10-4-4(e)] [326 IAC 2-7-5(3)] 382
F.7 Reporting Requirements [326 IAC 10-4-4(e)] 382
F.8 Liability [326 IAC 10-4-4(f)] 383
F.9 Effect on Other Authorities [326 IAC 10-4-4(g)] 384

SECTION G Clean Air Interstate (CAIR) Nitrogen Oxides Ozone Season Trading Program – CAIR Permit for CAIR Units Under 326 IAC 24-3-1(a) 385

G.1 Automatic Incorporation of Definitions [326 IAC 24-3-7(e)] [40 CFR 97.323(b)] 385
G.2 Standard Permit Requirements [326 IAC 24-3-4(a)] [40 CFR 97.306(a)] 385
G.3 Monitoring, Reporting, and Record Keeping Requirements [326 IAC 24-3-4(b)] [40 CFR 97.306(b)] 385
G.4 Nitrogen Oxides Ozone Season Emission Requirements [326 IAC 24-3-4(c)] [40 CFR 97.306(c)] 386
G.5 Excess Emissions Requirements [326 IAC 24-3-4(d)] [40 CFR 97.306(d)] 386
G.6 Record Keeping Requirements [326 IAC 24-3-4(e)] [326 IAC 2-7-5(3)] [40 CFR 97.306(e)] 387
G.7 Reporting Requirements [326 IAC 24 3 4(e) [40 CFR 97.306(e)] 387
G.8 Liability [326 IAC 24-3-4(f)] [40 CFR 97.306(f)] 388

G.9 Effect on Other Authorities [326 IAC 24-3-4(g)] [40 CFR 97.306(g)] 388

SECTION H.1 FACILITY OPERATION CONDITIONS - NSPS, SUBPART Dc 389

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)] 390

SECTION H.2 FACILITY OPERATION CONDITIONS - NSPS, SUBPART Y 391

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)] 396

SECTION H.3 FACILITY OPERATION CONDITIONS - NSPS, SUBPART IIII 397

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)] 398

SECTION H.4 FACILITY OPERATION CONDITIONS - NESHAP, SUBPART ZZZZ 400

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)] 401

CERTIFICATION 402
EMERGENCY OCCURRENCE REPORT 403
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT 405
SEMI-ANNUAL NATURAL GAS FIRED BOILER CERTIFICATION 407
PART 70 OPERATING PERMIT QUARTERLY REPORT 408

Attachments

Attachment A Preventative Maintenance Plan General Plant Fugitive Dust Emissions

Attachment B 40 CFR 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Attachment C 40 CFR 60, Subpart Y - Standards of Performance for Coal Preparation and Processing Plants

Attachment D 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Attachment E 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1, A.2, A.3 and A.4 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates an integrated steel mill.

Source Address:	1 North Broadway, Gary, Indiana 46402
Mailing Address:	1 North Broadway, Gary, Indiana 46402
General Source Phone Number:	219-888-3387
SIC Code:	3312
County Location:	Lake
Source Location Status:	Nonattainment for $PM_{2.5}$ Attainment or unclassifiable for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD and nonattainment NSR; Major Source, Section 112 of the Clean Air Act; 1 of 28 Source Categories

A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

This integrated steel mill consists of a main mill and eleven (11) on-site contractors:

(a) U. S. Steel - Gary Works, plant Id 089-00121, the primary operation, located at One North Broadway, Gary, Indiana 46402;

(b) International Mill Service, Inc. plant Id 089-00132, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;

(c) South Shore Slag LLC, plant Id 089-00133, the on-site contractor, located at One North Buchanan Street, Gary, Indiana 46402;

(d) Heckett Multiserv, plant Id 089-00170, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;

(e) Oil Technology, Inc., plant Id 089-00171, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;

(f) Central Teaming Company, plant Id 089-00172, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;

(g) Mid-Continent Coal and Coke Company, plant Id 089-00173, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;

(h) Tube City, Inc., plant Id 089-00174, the on-site contractor located at One North Broadway, Gary, Indiana 46401;

(i) AKJ Industries, Inc., plant Id 089- 00505, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;

(j) J.L. Smith Services DBA American Crushing & Recycling, plant Id 089- 00509, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;

(k) U.S. Aggregates, Inc., plant Id 089- 05256, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;

(l) Critser Companies, plant Id 089- 05333, the on-site contractor, located at One North Broadway, Gary, Indiana 46402.

Separate Part 70 permits will be issued to U.S. Steel - Gary Works and each on site contractor, solely for administrative purposes.

Company Name	Part 70 Permit Number
U.S. Steel - Gary Works	089-7663-00121
Central Teaming Company, Inc.	089-7684-00172
Heckett Multiserv,	089-7649-00170
International Mill Service, Inc.	089-5630-00132
AKJ Industries, Inc.	089-22772-00505
South Shore Slag LLC	089-26455-00133
Mid-Continent Coal and Coke Company	089-8064-00173
Tube City, Inc.	089-7648-00174
U.S. Aggregates, Inc.	089-21828-05256
J.L. Smith Services DBA American Crushing & Recycling	089-23525-00509
Oil Technology, Inc.	089-24654-00171
Critser Companies	089-28097-05333

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

The integrated steel mill, U.S. Steel-Gary Works consists of the following:

Coal Handling Operation

(a) One (1) coal car bottom thaw shed (holding yard), identified as CHY00071, constructed in 1959, combusting coke oven gas, with a maximum heat input capacity of 25 MMBtu per hour, with an open flame heater, with uncontrolled fugitive emissions.

(b) One (1) coal car side thaw station, identified as CHT0001, constructed in 1959, combusting natural gas, with a maximum heat input capacity of 15 MMBtu per hour, with an open flame heater, with uncontrolled fugitive emissions.

(c) One (1) No. 2 Coke Battery Precarbonization facility, consisting of three (3) lines, Line A, Line B and Line C identified as CH2A0020, CH2B0021 and CH2C0022, constructed prior to October 24, 1974, each with a maximum capacity of 153.5 tons per hour. Particulate matter emissions from the three lines are controlled by electrostatic precipitators (ESP), ESP A, ESP B and ESP C, identified as CH3029, CH3030 and CH3031, exhausting through stacks CH6034, CH6035 and CH6037, respectively.

(d) One (1) No. 3 Coke Battery Precarbonization facility consisting of three (3) lines Line A, Line B and Line C identified as CH3A0017, CH3B0018 and CH3C0019, constructed prior to October 24, 1974, each with a maximum capacity of 153.5 tons per hour. Particulate matter emissions from the three lines are controlled by electrostatic precipitators (ESP), ESP A, ESP B and ESP C, CH3026, CH3027 and CH3028, exhausting through stacks CH6028, CH6029 and CH6031, respectively.

Note: The No. 3 Coke Battery Precarbonization facility last operated on September 30, 2005. Pursuant to Significant Source Modification 089-28848-001221 and Significant Permit Modification 089-29236-00121, the No. 3 Coke Battery Precarbonization facility will be permanently shutdown and decommissioned.

(e) One (1) coal crusher: system consisting of three (3) enclosed hammer mills with a maximum capacity of 160 tons per hour, three (3) enclosed hammer mills with a maximum capacity of 150 tons per hour, and (2) enclosed hammer mills with a maximum capacity of 100 tons per hour, with fugitive emissions contained within the coal blending building.

(f) One (1) enclosed petroleum coke crusher with a maximum capacity of 400 tons per hour which also operates as a coal breaker with a maximum capacity of 1200 tons per hour. This unit is a totally enclosed hammer mill with fugitive emissions contained within the coal blending building.

(g) Coal Handling Storage Facilities, identified as CHSQ0003.

(h) One (1) frozen coal breaker, installed in 1959, with a maximum capacity pf 1300 tons per hour, with fugitive emissions contained within the coal blending building.

Coke Batteries

(a) No. 2 Coke Battery

(1) One (1) six (6) meter tall vertical flue coke battery with 57 ovens, No. 2 Coke Battery, identified as CP2B0079, constructed in November 1975, with a maximum charging capacity of 217 tons per hour. Excessive coke oven gas back pressure is controlled by three (3) flares lit with internal flare igniters CP3060, CP3061 and CP3062, exhausting to Bypass/Bleeder Flare Stacks CP6105, CP6106 and CP6107.

(2) The No. 2 Coke Battery underfiring system has a maximum combustion heat input capacity of 250 MMBtu per hour, exhausting to stack CP6040 equipped with a continuous opacity monitor (COM).

(3) The No. 2 Coke Battery has a maximum pushing capacity of 161 tons of coke per hour, with particulate emissions controlled by a Mobile Scrubber Car 9119, 9120, 9121 or 9122, identified as CP3034, exhausting to Stack CP6041.

(4) Nos. 2 and 3 Quench Towers identified as CP1Q0080 and CP2Q0081, constructed in 1975, with a maximum combined capacity of 322 tons of coke per hour, and No. 1 Quench Tower identified as CPQ0087 constructed in 1975 with a capacity of 322 tons of coke per hour, each equipped with a quench water header and baffle system with sprays. Nos. 2 and 3 Quench Towers service Nos. 2 and 3 Coke Batteries. No. 1 Quench Tower services Nos. 2, 3, 5 and 7 Coke Batteries.

(5) The No. 2 Coke Battery fugitive emissions are generated from charging operations, off take piping, door leaks, lid leaks and collector main leaks.

(b) No. 3 Coke Battery

(1) One (1) six (6) meter tall vertical flue coke battery with 57 ovens, No. 3 Coke Battery, identified as CP3B0086, constructed in November 1974, with a maximum charging capacity of 217 tons per hour. Excessive coke oven gas

back pressure is controlled by three (3) flares lit with internal flare igniters CP3063, CP3064 and CP3065, exhausting to Bypass/Bleeder Flare stacks CP6108, CP6109 and CP 6110.

(2) The No. 3 Coke Battery underfiring system has a maximum combustion heat input capacity of 250 MMBtu per hour, exhausting to stack CP6045, equipped with a continuous opacity monitor (COM).

(3) The No. 3 Coke Battery has a maximum pushing capacity of 161 tons of coke per hour, with particulate emissions controlled by a Mobile Scrubber Car 9119, 9120, 9121 or 9122, identified as CP3038, exhausting to stack CP6046.

(4) The No. 1 Quench Tower, identified as CP3Q0087, constructed in 1975, with a maximum capacity of 322 tons of coke per hour and Nos. 2 and 3 Quench Towers, identified as CP1Q0080 and CP2Q0081 constructed in 1975 with a maximum capacity of 322 tons of coke per hour, equipped with a quench water header and baffle system with sprays. Nos. 2 and 3 Quench Towers service Nos. 2 and 3 Coke Batteries. No. 1 Quench Tower services Nos. 2, 3, 5 and 7 Coke Batteries.

(5) The No. 3 Coke Battery fugitive emissions are generated from charging operations, offtake piping, door leaks, lid leaks and collector main leaks.

Note: The No. 3 Coke Battery last operated on September 30, 2005. Pursuant to Significant Source Modification 089-28848-001221 and Significant Permit Modification 089-29236-00121, the No. 3 Coke Battery will be permanently shutdown and decommissioned.

(c) No. 5 Coke Battery

(1) One (1) three (3) meter short vertical flue coke oven battery with 77 ovens, No. 5 Coke Battery, identified as CP5B0090, constructed in 1954, with a maximum charging capacity of 84 tons per hour. Excessive coke oven gas back pressure is controlled by two (2) flares lit with internal flare igniters CP3066 and CP3067, exhausting to Bypass/Bleeder Flare stacks CP6111 and CP 6112.

(2) The No. 5 Coke Battery underfiring system has a maximum combustion heat input capacity of 125 MMBtu per hour, exhausting to stack CP6049, equipped with a COM.

(3) The No. 5 and No. 7 Coke Batteries have a combined maximum pushing capacity of 103 tons of coke per hour, with particulate emissions controlled by a common baghouse, identified as CP3041, exhausting to stack CP6050.

(4) Nos. 5 and 6 Quench Towers identified as CP5Q0091 and CP5Q0095, constructed in 1954, with a maximum combined capacity of 103 tons of coke per hour, equipped with a quench water header and baffle system with sprays. These towers service Nos. 5 and 7 Coke Batteries.

(5) The No. 5 Coke Battery fugitive emissions are generated from charging operations, offtake piping, door leaks, lid leaks and collector main leaks.

(d) No. 7 Coke Battery

(1) One (1) three (3) meter short vertical flue coke oven battery, with 77 ovens, No. 7 Coke Battery, identified as CP7B0094, constructed in 1954, with a maximum

charging capacity of 84 tons per hour. Excessive coke oven gas back pressure is controlled by two (2) flares lit with internal flare igniters CP3068 and CP3069, exhausting to Bypass/Bleeder Flare stacks CP6113 and CP6114.

(2) The No. 7 Coke Battery underfiring system has a maximum combustion heat input capacity of 125 MMBtu per hour, exhausting to stack CP6053 equipped with a COM.

(3) The No. 5 and No. 7 Coke Batteries have a combined maximum pushing capacity of 103 tons of coke per hour, with particulate emissions controlled by a common baghouse, identified as CP3041, exhausting to stack CP6050.

(4) Nos. 5 and 6 Quench Towers identified as CP5Q0091 and CP5Q0095, constructed in 1954, with a maximum combined capacity of 103 tons of coke per hour, equipped with a quench water header and baffle system with sprays. These towers service Nos. 5 and 7 Coke Batteries.

(5) The No. 7 Coke Battery fugitive emissions are generated from charging operations, offtake piping, door leaks, lids leaks and collector main leaks.

(e) Natural Gas Underfiring Injection System Jets

Three (3) natural gas injection jets, identified as CPNGI001, CPNGI002 and CPNGI003, constructed in 2001, with heat input capacities of 22 MMBtu per hour, 43 MMBtu per hour and 122 MMBtu per hour, respectively. Natural gas injection provides Btu stabilization control, coke oven gas quality control and emergency gas supply to the battery underfiring system.

Coke By-Products Recovery Plant

(a) Control Station No. 1

(1) Four (4) Predecanters D-101A, D-101B, D-101C and D-101D, identified as CBP10100, CBP20101, CBP30102 and CBP30103, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station No. 1 and into the 72- inch Suction Main.

(2) Two (2) Still Decanters D-102B and D-102A, identified as CBD00104 and CBD00105, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station No. 1 and into the 72-inch Suction Main.

(3) Two (2) Gary Decanters D-5 and D-4, identified as CBD20107 and CBD30108, constructed in 1975 with vapors directed by a natural gas blanket system CB3080 to Control Station No. 1 and into the 72-inch Suction Main.

(4) One (1) Bleed-Off Tank B101, identified as CBB10106, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station No. 1 and into the 72 inch Suction Main.

(5) One (1) Liquor Storage Tank T-7, identified as CBL10109, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station No. 1 into the 72-inch Suction Main.

(6) Two (2) Tar Storage Tanks T-2 and T-3, identified as CBT00110 and CBT00111, constructed in 1968 with vapors, directed by a natural gas blanketing system CB3080 to Control Station No. 1 and into the 72-inch Suction Main.

(7) One (1) Storage Tank T-6, identified as CBT20112, constructed in 1968, with vapors, directed by a natural gas blanketing system CB3080 to Control Station No. 1 and into the 72-inch Suction Main.

(8) Two (2) PC Tar Storage Tanks T-363D and T-363A, identified as CBT30113 and CB40114, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station No. 1 into the 72-inch Suction Main.

(9) One (1) Dry Tar Storage Tank T-9, identified as CBT50115, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station No. 1 and into the 72 inch Suction Main.

(10) One (1) Sump S-9 serving Dry Tar Storage Tank ST-9, identified as CBS10116, constructed in 1991, with vapors, directed by a natural gas blanketing system CB3080 to Control Station No. 1 and into the 72-inch Suction Main.

(b) Control Station No. 2

(1) Three (3) Tar Tanks T-304C, T-304B and T-304A , identified as CBT60118, CBT70119, and CBT80121, constructed in 1990, 1953 and 1953, respectively, with vapors directed by a natural gas blanketing system CB3081 to Control Station No. 2 and into the 72-inch Suction Main.

(2) One (1) Tar Feed Tank T-306C, identified as CBTF0164, constructed in 1953, with vapors directed by a natural gas blanketing system CB3081 to Control Station No. 2 and into the 72 inch Suction Main.

(3) One (1) Wash Oil Tank T-331AN, identified as CBO10123, constructed in 1961, with vapors directed by a natural gas blanketing system CB3081 to Control Station No. 2 into the 72-inch Suction Main.

(4) Two (2) Light Oil Storage Tanks T-312 and T-311, identified as CBO20124 and CBO30125, constructed in 1953 with vapors directed by a natural gas blanketing system CB3081 to Control Station No. 2 and into the 72-inch Suction Main.

(5) One (1) sump S-304/306, constructed in 1996, with vapors directed by a natural gas blanketing system CB3081 to Control Station No. 2 and into the 72-inch Suction Main.

(c) Control Station No. 3

(1) Four (4) Predecanters D-105A, D-105B, D-105C and D-105D, identified as CBP70137, CBP80138, CBP50139 and CBP60140, constructed in 1976, with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.

(2) Two (2) Still Decanters D-106A and D-106B, identified as CBD60134 and CBD70136, constructed in 1976, with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.

(3) Two (2) Gary Decanters D-6 and D-7, identified as CBD40132 and CBD50133, constructed in 1976, with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.

(4) Two (2) Tar Decanters D-5/7N and D-5/7S, identified as CBD80141 and CBD90142, constructed in 1953, with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.

(5) One (1) Bleed-Off Tank B-104, identified as CBB20135, constructed in 1976 with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.

(6) One (1) Liquor Surge Tank T-11, identified as CBL60131, constructed in 1975, with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.

(d) Control Station No. 4

(1) Four (4) Circulating Liquor Decanters L-100B, L-100C, L-100D and L-100E, identified as CBC30127, CBC40128, CBC50129 and CBL80145, constructed in 1975, with vapors directed by a natural gas blanketing system CB3083 to Control Station No. 4 and into the 72-inch Suction Main.

(2) Two (2) Liquor Surge Tanks T-340A and T-340B, identified as CBC20126 and CBL70143, constructed in 1995, with vapors directed by a natural gas blanketing system CB3083 to Control Station No. 4 and into the 72-inch Suction Main.

(3) One (1) Primary Cooler Tank T-345A, identified as CBTF0130, constructed in 1995 with vapors directed by a natural gas blanketing system CB3083 to Control Station No. 4 and into the 72-inch Suction Main.

(e) Control Station No. 5

(1) One (1) Sump of Circulating Liquor Ls-100E, identified as CBS40144, constructed in 1991, with vapors directed by a natural gas blanketing system CB3051 to Control Station No. 5 and into the 72-inch Suction Main.

(2) Three (3) Tar Storage Tanks T-301,T-302A, T-302B, identified as CBTA0146, CBTB0147 and CBTC0148, constructed in 1948, 1930, and 1930, respectively, with vapors directed by a natural gas blanketing system CB3051 to Control Station No. 5 and into the 72-inch Suction Main.

(3) Two (2) Storage Tanks T-7100, T7110 and T-7120, constructed and refurbished in 1997, with vapors directed by a natural gas blanketing system CB3051 to Control Station No. 5 and into the 72-inch Suction Main.

(4) Two (2) Oil/Tar Separator Tanks, T-7000 and T-7010, constructed in 1997, with vapors directed by a natural gas blanketing system CB3051 to Control Station No. 5 and into the 72-inch Suction Main.

(5) Two (2) Oil and Tar Receiver Tanks, T-7020 and T-7030, constructed in 1997 with vapors directed by a natural gas blanketing system CB3051 to Control Station No. 5 and into the 72-inch Suction Main.

(f) One (1) Surge Tank T-7800, constructed in 1997, with vapors directed to a nitrogen gas blanketing system.

(g) Distillation Sump Emission Control

One (1) Distillation Sump Emission Control System, identified as CBS80151, constructed in 1989 with vapors directed to a nitrogen gas blanketing system.

(h) Coke Oven Gas (COG) High Pressure Control System, constructed in 1991, contains instrumentation and control valves designed to limit the maximum pressure in the COG distribution system. Excess COG pressure is directed to and combusted in a bleeder flare with emissions exhausting to Stack CG6077.

(i) Equipment in Benzene Service consist of several hundred components pumps, exhausters, valves, flanges and pressure relief devices in benzene service within the byproducts plant.

Coke Oven Gas (COG) Desulfurization Facility

(a) One (1) amine unit, constructed in 1997, removes hydrogen sulfide and other organic sulfur compounds from the coke oven gas (COG) stream.

(b) One (1) reflux unit, constructed in 1997, recycles ammonia and acid gas into the COG stream.

(c) One (1) hydrogen cyanide (HCN) destruction unit, constructed in 1997 converts HCN in the acid gas stream to ammonia to minimize corrosion to the Sulfur Recovery Unit.

(d) One (1) sulfur recovery unit, constructed in 1997, converts sulfur compounds in the acid gas stream to elemental sulfur. This sulfur is sold as a product.

(e) One (1) incineration unit, constructed in 1997, converts remaining sulfur compounds not removed by the sulfur recovery unit into sulfur dioxide.

Coke Plant Boiler House

(a) Two (2) Boilers, Nos. 1 and 2, identified as CSS10155 and CSS20156, constructed prior to 1970, with a maximum heat input capacity of 160 MMBtu per hour each, exhausting to stack CS6061. These boilers are equipped to combust natural gas.

(b) One (1) Boiler, No. 3, identified as CSS30157, constructed in 1943, with a maximum heat input capacity of 160 MMBtu per hour, exhausting to stack CS6062. This boiler is equipped to combust natural gas and coke oven gas.

(c) Two (2) Boilers, Nos. 4 and 5, identified as CSS40158 and CSS50159, constructed prior to 1955, with a maximum heat input of 170 MMBtu per hour each, exhausting to stack CS6063. These boilers are equipped to combust natural gas and coke oven gas.

(d) One (1) Boiler No. 6, identified as CSS60160, constructed in 1955, with a maximum heat input capacity of 170 MMBtu per hour, exhausting to stack CS6064. This boiler is equipped to combust natural gas and coke oven gas.

(e) One (1) Boiler, No. 7, identified as CS70161, constructed in 1976, with a maximum heat input capacity of 170 MMBtu per hour, exhausting to stack CS6065. This boiler is equipped to combust natural gas and coke oven gas.

(f) One (1) Boiler, No. 8, identified as CSS80162, constructed in 1981, with a maximum heat input capacity of 249 MMBtu per hour, exhausting to stack CS6066. This boiler is equipped to combust natural gas and coke oven gas.

(g) One (1) natural gas fired boiler at the coke plant boiler house, identified as the temporary rental boiler CSS80163, constructed in 2004 with a maximum heat input capacity of 235 MMBtu/hr and equipped with a low NO_X burner, exhausting to the existing stack CS6066.

(h) Two (2) boilers at the coke plant boiler house, identified as Boilers No. 9 CSS80164 and No. 10 CSS80165, constructed in 2004, each with a maximum heat input capacity of 235 MMBtu/hr, exhausting to stacks CS6067 and CS6068, respectively. These boilers are equipped to burn natural gas and coke oven gas.

(i) One (1) lime storage silo with a maximum capacity of 20 tons per hour and emissions controlled by a baghouse LRS-1, constructed in 2001, exhausting inside the building.

Number 3 Sinter Plant

(a) Three (3) Sinter Strands, constructed in 1958 , identified as ISS10379, ISS20380 and ISS30381, each with a 50 MMBtu per hour reheat burners identified as ISB001, ISB002 and ISB003 and a maximum capacity of 225 tons of sinter per hour each, controlled by two (2) Windbox Gas Cleaning Systems IS3203 and IS3204, installed in 1996, each comprised of a Quench Reactor, Dry Venturi Scrubber, a baghouse operated in series, exhausting to Windbox stacks IS6198 and IS6199 which are equipped with VOC CEMS.

(b) One (1) Cold Screen Station, identified as ISR00389, constructed in 1958, with a maximum capacity of 450 tons per hour, using a Baghouse IS3209 as a control device and exhausting to stack IS6207.

(c) One (1) S1/S2 Conveyer System, identified as ISY00388, constructed in 1979, with a maximum capacity of 450 tons per hour, that transfers sinter from the sinter coolers to the cold screening station, using a baghouse IS3208 as a control device and exhausting to stack IS6206.

(d) Three (3) Sinter Coolers, identified as ISC10385, ISC20386, and ISC30387, constructed in 1958, with a maximum capacity of 225 ton per hour each, with emissions exhausting to stacks IS6203, IS6204, and IS6205 respectively.

(e) Three (3) Sinter Strand Discharge End Areas, identified as ISS10379, ISS20380 and ISS0381, constructed in 1958, using three (3) baghouses as control devices, designated as IS3205, IS3206, and IS3207, exhausting to stacks IS6200, IS6201, and IS6202 respectively.

(f) Blended Material Storage Bin Building, identified as ISB00377, constructed in 1979, including bins, feeders and conveyors, with a maximum capacity of 1,000 tons per hour, using a baghouse IS3196 as a control device and exhausting to stack IS6197.

(g) Storage and Blending Piles, identified as ISBP0376, with fugitive emissions.

Blast Furnaces

(a) Raw materials shipped to the ore yard identified as IAOYO366, are transferred to the Highline, identified as IAHL0307, from which raw material shipments and coke are sent through the Stockhouse.

(b) The No. 14 Blast Furnace Stockhouse, constructed in 1979, modified in 2009 with the addition of a baghouse for particulate control, identified Blast Furnace No. 14 Stockhouse Baghouse, exhausting to stack IDSH0367, servicing Blast Furnace 14.

(c) The No 6 Blast Furnace Stockhouse constructed in 1979, controlled by dust suppression, services Blast Furnace No. 6. The No. 8 Blast Furnace Stockhouse constructed in 1979, controlled by dust suppression, services Blast Furnace No. 8.

(d) No. 4 Blast Furnace, constructed in 1917, with a maximum capacity of 200 tons per hour, identified as IABF0308, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using pulverized coal at a rate of 26 tons per hour, oil (from on-site contractor when it meets specifications) at a rate of 70 gallons per minute and/or coal tar (when the on-site contractor tar centrifuge is not operating) at a rate of 70 gallons per minute.

(1) Three (3) No. 4 Blast Furnace Stoves identified as IAST0360, replaced in 1947, with a maximum heat input capacity of 350 MMBtu per hour total combusting blast furnace gas (BFG) and natural gas, exhausting to the combustion stack IA6160.

(2) No. 4 Blast Furnace Casthouse, identified as IABF0308, constructed in 1917, with emissions from tapping and runners controlled by a natural gas iron oxide fume suppression system IA3177, exhausting to casthouse roof monitor IA6010.

(3) One (1) Slag Pit, identified as IASP0311, with fugitive emissions.

(e) No. 6 Blast Furnace, constructed in 1910, with a maximum capacity of 200 tons per hour, identified as IBBFO341, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using pulverized coal injected at a rate of 26 tons per hour, oil at a rate of 70 gallons per minute and /or coal tar at a rate of 70 gallons per minute.

(1) Four (4) No. 6 Blast Furnace Stoves identified as IBST0361, replaced in 1997, with a maximum heat input capacity of 350 MMBtu per hour total, combusting Blast Furnace Gas (BFG) and natural gas exhausting to the combustion stack IB6168.

(2) No. 6 Blast Furnace Casthouse, identified as IBBF0341, constructed in 1910, with emissions from tapping and runners controlled by a natural gas iron oxide fume suppression system IB3178, exhausting to casthouse roof monitor IB6011.

(3) One (1) Slag Pit, identified as IBSP0335, with fugitive emissions.

(f) No. 8 Blast Furnace, constructed in 1909, with a maximum capacity of 183 tons per hour, identified as ICBFO354, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using pulverized coal injected at a rate of 26 ton per hour, oil at a rate of 70 gallons per minute and/or coal tar at a rate of 70 gallons per minute.

(1) Four (4) No. 8 Blast Furnace Stoves, identified as ICST0362, replaced in 1999, with a maximum heat input capacity of 325 MMBtu per hour total, combusting Blast Furnace Gas and natural gas, exhausting to the combustion stack IC6175.

(2) No. 8 Blast Furnace Casthouse, identified as ICBF0354, constructed in 1909, with emissions from tapping and runners controlled by a natural gas iron oxide fume suppression system IC3179, exhausting to cast house roof monitor IC6012.

(3) One (1) Slag Pit, identified as ICSP0363, with fugitive emissions.

(g) No. 14 Blast Furnace, constructed in 1974, with a maximum capacity of 450 tons per hour, identified as IDBF0369, using a Blast Furnace Gas Distribution System to collect

the blast furnace gas and using pulverized coal injected at a rate of 80 tons per hour, oil at a rate of 150 gallons per minute and/or coal tar at a rate of 150 gallons per minute.

(1) Three (3) No. 14 Blast Furnace Stoves identified as IDST0359, constructed in 1974, with a maximum heat input capacity of 700 MMBtu per hour total, combusting blast furnace gas and natural gas, exhausting to the combustion stack ID6184;

(2) No. 14 Blast Furnace Casthouse, identified as IDBF0369, constructed in 1974 with emissions controlled by a baghouse, identified as ID3185, exhausting to stack ID6187 and fugitive emissions exhausting through the casthouse roof monitor ID6013;

(3) One (1) Slag Pit, identified as IDSP0371, with fugitive emissions.

(4) Pursuant to Significant Source Modification 089-20118-00121, issued October 20, 2005, the following activities involved in the No. 14 Blast Furnace Reline Project were approved for construction:

(A) Replacement of furnace refractory lining with new and thinner refractory brick.

(B) Replacement of furnace shell.

(C) Removal and replacement of the top charging system with a new “bell-less” charging system.

(D) Placement of new copper staves in the mantle area of the furnace.

(E) Installation of copper cooling plates and a new bustle pipe.

(F) Repair of the checker work brick in the stoves and various structural, mechanical and electrical repairs.

(G) Enlargement of the slag granulator and addition of a stack.

(H) Changes to the casthouse and casthouse emissions control system to improve capture efficiency of hoods at the tap holes, iron troughs and runners.

(I) Removal and replacement of the existing system for cleaning blast furnace gas with a more efficient scrubbing system.

(h) One (1) No. 14 Blast Furnace Slag Granulation Plant owned by U.S. Steel -Gary Works and operated by U.S. Steel - Gary Works as part of the slag processing operation. The granulation plant has a maximum capacity of 1,704,000 tons of steel mill slag per year, consisting of the following:

(1) One (1) hot slag quenching operation, constructed in 1991, directed to a hooded exhaust stack.

(2) Two (2) silos, constructed in 1991, for temporary slag storage.

(3) Two (2) belt conveyers, constructed in January 1995.

(4) One (1) storage silo and loadout bay, constructed in May 1995, with a capacity of 400,000 tons per year.

(i) One (1) blast furnace gas distribution system consisting of instrumentation and valves designed to limit the maximum pressure through the distribution system by venting excess blast furnace gas to the three (3) bleeder stacks equipped with Flare No. 1 identified as BG6073, constructed before 1920, Flare No. 2, identified as BG6074 constructed before 1920 and Flare No. 4 identified as BG6075, constructed in 1974.

(j) One (1) iron beaching process, constructed prior to 1965, identified as IMIB0378.

(k) One (1) transfer ladle maintenance operation, constructed prior to 1965, identified as, IMVM0375.

Number One Basic Oxygen Process (BOP) Shop

(a) Two (2) Stations, identified as No. 1 and No. 2, Hot Metal Transfer and Desulfurization Stations. The Desulfurization Stations were originally constructed in 1981 and the Hot Metal Transfer Stations were originally constructed in 1965, and replaced in 1998. Each station consists of Hot Metal Desulfurization, SSDS0201, Hot Metal Transfer SSMT0203 and Slag Skimming SSSS0205. Hot metal from the blast furnaces is desulfurized and skimmed prior to charging in the steel making vessels. The maximum capacity of each station is 456 tons per hour. Each station is equipped with a local exhaust ventilation hood to capture emissions ducted to the Hot Metal Desulfurization/Skimming Stations Baghouse SS3100. The desulfurization units are equipped with nitrogen suppression around where the desulfurization lance penetrates the hood hole.

(b) One (1) Flux handling system, identified as SSFH0206, constructed in 1965, used for unloading, temporary storage, and transfer of fluxing agents to the steel making vessels, with a maximum capacity of 80 tons per hour. Emissions are controlled by No. 1, No. 2 and No. 3 baghouses SS3058, SS3059, and SS3053. Nos. 1 and 2 exhaust inside the building and No. 3 discharges through stack SS6056.

(c) Basic Oxygen Process (BOP) Vessels, constructed in 1965, consisting of BOP vessel M, identified as SSVM0234, vessel E, identified as SSVE0235 and vessel D, identified as SSVD0236, with a maximum capacity of 250 tons per hour each. Emissions are controlled by open combustion hoods and an exhaust emission hood collection system, which exhausts emissions to the Gas Cleaning Systems SS3103 and SS3104.

(d) Two (2) gas cleaning systems SS3103 and SS3104 that process the exhaust gases from the three (3) steel making vessels consisting of three (3) quenchers, two (2) scuppers, two (2) venturi scrubbers, two (2) separators, two (2) gas coolers fitted with internal mist eliminators and two (2) induced draft fans. Emissions exhaust through stacks SS6102 and SS6103.

(e) CASbell/OB Lancing Stations M, D and E, include the controlled argon stirring process and blowing of oxygen to maintain temperature and chemistry. Constructed in 1981, Station M, identified as SSCM0231, Station E identified as SSCE0232, and Station D identified as SSCD0233 with a maximum capacity of 250 tons per hour each. Emissions are controlled by the CASbell/OB Lancing baghouse SS3105, exhausting through Stack SS6104 and uncaptured emissions venting to the roof monitor SS6636.

(f) One (1) Slingot Moulding Station, including the casting of bottom-poured steel ingots, identified as SSMS0227, constructed in 1965, exhausting to the roof monitor SS6637.

(g) Nine (9) natural gas fired Ladle Preheaters and Dryers identified as No. 1 through 9, with 1 through 4, constructed in 1983, 5 and 6 constructed in 1982 and 7 through 9 construction unknown. Six (6) Preheaters with a capacity of 14 MMBtu/hr each and three (3) Dryers with a capacity of 10 MMBtu/hr each, identified as SSLD0230, exhausting through Roof Monitor SS6637.

(h) One (1) Continuous Caster, identified as SCSC0274, constructed in 1967, including a Tundish dryer with a heating capacity of 7.0 MMBtu/hr per hour, continuously casting steel slabs with a maximum capacity of 275 tons per hour. Emissions exhaust through Roof Monitor SC6638.

(i) One (1) fugitive emissions mitigation system at the No. 1 BOP Shop, constructed in June 2002, consisting of a capture hood system ducted to a 99% efficient baghouse with a flow rate of 11,500 acfm.

(j) One emergency slag skimming station with a maximum capacity of 456 tons per hour with emissions ducted to the Hot Metal Transfer Station and Desulfurization/Skimming Stations Baghouse SS3100.

Number Two Q-BOP Shop

(a) Two (2) Hot Metal Transfer and Desulfurization Stations, identified as NSDS0246, constructed in 1987, with a maximum capacity of 510 tons per hour. These stations included: two (2) Hot Metal Mixers, identified as NSMM0264 and two (2) Hot Metal Mixer Heaters, identified as NSMH0251, constructed in 1973, with a maximum capacity of 255 tons per hour. The natural gas fired mixer heaters have a heat input capacity of 10 MMBtu/hr each. Emissions from the hot metal transfer and desulfurization stations, mixers and heaters are controlled by the Hot Metal Transfer and Desulfurization Stations Baghouse NS3115, discharging through NS6144 and the uncontrolled emissions go through roof monitor NS6631.

(b) Q-Basic Oxygen Process (BOP) vessels, constructed in 1973, consisting of BOP vessel T identified as NSVT0268, vessel W, identified as NSVW0269, and vessel Y, identified as NSVY0270, with a maximum capacity of 250 tons per hour each. Primary emissions are controlled by open combustion hood and two (2) Gas Cleaning Systems, secondary emissions are controlled by the Secondary Emissions Baghouse NS3124, exhausting to stack NS6123, and uncontrolled emissions exhaust through Roof Monitor NS6632.

(c) Two (2) Gas Cleaning Systems, identified as NS3125 and NS3126 located in the gas cleaner facility, constructed in 1973, process the exhaust gases from the three (3) steel making vessels through three (3) quenchers, two (2) scuppers (tank like structures that remove excess quench water and solids from the gas stream), two (2) venturi scrubbers, two (2) separators, two (2) gas coolers with mist eliminators, and two (2) induced draft fans exhausting to Stacks NS6124 and NS6125.

(d) Three (3) Flux Bins T, W, and Y, identified as NSVT0265, NSVW0266 and NSVY0267, constructed in 1973, with a maximum capacity of 141 tons per hour each. Emissions are controlled by five (5) baghouses. Three (3) Flux Transfer Baghouses at 166' level identified as NS3112, NS3108, and NS3107, exhausting through Stacks NS6623, NS6627and NS6628 recycling captured material back to the process; One (1) North Flux Handling Baghouse at 116' level identified as NS3109 and one (1) South Flux Handling Baghouse at 116' level identified as NS3110, exhausting through stacks NS6626 and NS6625. Uncontrolled emissions exhaust through the roof monitor NS6632.

(e) Three (3) Ladle Metallurgical Facilities, LMF1 identified as NSL10293, LMF 2 identified as NSL20294 were constructed in 1986 and LMF 3 identified as NSL30295, constructed

in 1991 with a maximum capacity of 348 tons per hour each. Hot fume emissions from LMF 1 and 2 are controlled by Nos. 1 and 2 LMF Hot Fume Exhaust baghouses NS3135 and NS3136, exhausting through stacks NS6146 and NS6147. Material handling emissions at LMF 1 and 2 are controlled by the LMF Nos. 1 and 2 Material Handling baghouse NS3052, exhausting through stack NS6055. The LMF 3 Hot Fume Exhaust and Material Handling emissions are controlled by the LMF 3 Hot Fume and Material Handling Baghouse NS3137, exhausting to stack NS6148. All uncontrolled emissions exhaust through the roof monitor NS6634.

(f) One (1) R-H Vacuum Degasser, identified as NSVD0271, constructed in 1989, with a maximum capacity of 297.1 tons of steel per hour consisting of two (2) natural gas fired heaters, one (1) active and one (1) spare, identified as NSAB0276 and NSSB0275, with heat input capacities of 12 MMBtu per hour and 3 MMBtu per hour, respectively. Carbon monoxide and other combustible gas emissions are controlled with a flare that exhausts through Stack NS6145 and uncontrolled emissions exhaust through the Roof Monitor NS6634.

(g) One (1) Slag Conditioning Station servicing the RH Vacuum Degasser, constructed in 1997, with a maximum capacity of 297.1 tons of steel per hour.

(1) PM_{10} emissions from the station are controlled by a baghouse exhausting through Stacks S-1 through S-6 and recycling captured material back to the process.

(2) PM_{10} emissions from the material handling of slag conditioning and metallurgical agents are exhausted through the RH Vacuum Degasser Slag Conditioning Baghouse NS3207, exhausting through Stack NS6636.

(h) One (1) Daytank Lime Silo at the lime dumping station, identified as NSDS0250 constructed in 1971. Emissions are controlled by the Daytank Lime Silo baghouse NS3106, exhausting through the stack, NS6629.

(i) Three (3) Continuous Casting Lines, identified as Lines A, B and C identified as, NCCA0284, NCCB0285 and NCCC0286, with a total maximum capacity of 800 tons per hour combined. Lines A and B were constructed in 1986. Line C was constructed in 1991. Emissions from the continuous casters go to the Roof Monitor NC6635.

(j) Fourteen (14) natural gas fired Ladle Preheaters, identified as NBLD0262, eleven (11) with a heat input capacity of 9 MMBtu per hour each and three (3) with a heat input of 10 MMBtu per hour each. Emissions go through Roof Monitor NS6633.

(k) Two (2) Hot Metal Ladle Skimmers, identified as NSLS0248, constructed in 1973. Emissions go through Roof Monitor NS6631.

(l) Two (2) Steel Slag Skimming Stations, consisting of slag skimmers, identified as NSS10292 and NSS20287. Both were constructed in 1973. Emissions go through Roof Monitor NS6633.

(m) One (1) Slingot Station, identified as NSST0290, constructed in 1986. Emissions go through Roof Monitor NS6634.

(n) Eight (8) natural gas fired Tundish Preheaters located at the No. 2 Caster, with a heat input capacity of 6 MMBtu per hour each. Emissions go through Roof Monitor NC6635.

Hot Rolling Mill

(a) Four (4) reheat furnaces Nos. 1, 2, 3 and 4, identified as RMF10500, RMF20501, RMF30502 and RMF40503 commenced operation in 1967, with heat input capacity of 600 MMBtu per hour each. Each furnace is equipped to combust natural gas and coke oven gas with emissions exhausting through Stacks RM6500, RM6501, RM6502 and RM6503.

(b) Two (2) waste heat boilers Nos. 1 and 2 , identified as RB1B0508 and RB2B0509, commenced operation in 1967, with a heat input capacity of 226 MMBtu per hour each. The heat input capacity from fuel from these boilers is derived from a combination of waste heat ducted from the reheat furnaces and the combustion of natural gas and coke oven gas. Emissions exhaust through the waste heat boiler stacks HB6504 and HB6505.

(c) One (1) 84-inch Hot Strip Mill, identified as RMV00504, commenced operation in 1967, with a maximum capacity of 856 tons per hour, 5 roughing mills and a 7-stand finishing mill with fugitive emissions through a Roof Monitor RM6630.

Continuous Pickling Lines

(a) One (1) 84-inch Pickle Line, the North Continuous Pickle Line, identified as HWPO0625, constructed in 1968, with a maximum capacity of 314 tons per hour consisting of four (4) pickle tanks and two (2) rinse tanks (hot and cold). Emissions at this pickle line are controlled by a fume exhaust scrubber, HW3545 exhausting to stack HW6525.

(b) One (1) 80-inch Pickle Line, the South Continuous Pickle Line, identified as HMPO0589, constructed in 1948, with a maximum capacity of 91 tons per hour, consisting of three (3) pickle tanks and two (2) rinse tanks (hot and cold). Emissions are controlled by a fume exhaust scrubber, HM3540, exhausting to stack HM6520.

Sheet Products Division

(a) North Sheet Mill

(1) One (1) 5-Stand Cold Reduction Mill, identified as H5M50637, constructed in 1964, with a maximum capacity of 400 tons per hour, consisting of 5 Mill Stands. Emissions are controlled by fume collection H53547, exhausting to Stack H56527.

(2) Twenty-six (26) 4-Stack A Box Annealing Furnaces and 50 bases, identified as HTAF0813 through HTAF0838, constructed in 1964, with a heat input capacity of 12 MMBtu per hour each. These furnaces are direct fired with emissions exhausting through vent pipes HT6530 through HT6555.

(3) One (1) 80-inch temper mill, constructed in 1964, with a maximum capacity of 250 tons per hour, with fugitive emissions.

(4) One (1) 80-inch Recoil Line, constructed in 1964, with a maximum capacity 120 tons per hour, with fugitive emissions.

(b) South Sheet Mill

(1) Seventeen (17) 8-Stack A Box Annealing furnaces and 66 bases, identified as HXBA0560 through HXBA0576, constructed in 1948. Eleven (11) furnaces have a heat input capacity of 15 MMBtu per hour each and the remaining six (6) are

rated at 18 MMBtu per hour each. Emissions from these furnaces exhaust through the Roof Monitor HX6003.

(2) One (1) 2-Stand Temper Mill, identified as H2M00579, constructed in 1974, with a maximum capacity of 89 tons per hour, with fugitive emissions through Roof Monitor H26004.

(3) One (1) No. 6 East Galvanizing Line, constructed in 1962, with a maximum capacity of 48 tons an hour, with one (1) annealing furnace identified as H6F10527 with a heat input of 45 MMBtu per hour and emissions through stack H66516. Also, contains one (1) Galvanneal Furnace identified as HF20529 with a heat input capacity of 20.0 MMBtu per hour and emissions exhausting through Roof Monitor H66006.

(4) Two (2) hydrogen atmosphere batch annealing furnaces, with a total heat input capacity of 10.26 MMBtu per hour, constructed in 1997, consisting of three (3) fixed bases and two (2) movable cooling hoods.

(5) One (1) 84-inch Hot Roll Temper Mill, constructed in 1967, with a maximum capacity of 124 tons per hour, with fugitive emissions.

(6) One (1) coil prep line, constructed in 1968, with a maximum capacity of 73 tons per hour, with fugitive emissions.

(c) Electro-galvanizing Line (EGL)

(1) One (1) Electro-galvanizing Line (EGL), with one HCl pickle tank, No. 1 Pickle tank, identified as HET20685, a cleaner section, a plating section and associated scrubber, with a maximum capacity of 60.5 tons per hour. Fumes from the Pickle Section are controlled by a fume scrubber HE3583 exhausting through stack HE6563. The single sided process for this coating line was constructed in 1977 and was modified in 1993 to a double sided process for coating.

(2) One (1) natural gas fired Boiler No. 1 in the EGL Boiler House, identified as HBB10675, constructed in 1978 and modified in 2001, with a heat input capacity of 39.147 MMBtu per hour, exhausting through stack HB6559.

Tin Division

(a) One (1) 6-Stand Cold Reduction Mill, identified as TRM00709, constructed in 1967, with a maximum capacity of 150 tons per hour. Emissions are controlled by a mist eliminator TR3600, exhausting to stack TR6575.

(b) One (1) cleaning line, identified as No. 7 Cleaning Line, constructed in 1967, with a maximum capacity of 80 tons per hour. Fumes are controlled by a fume scrubber exhausting to a stack.

(c) Two (2) Annealing Lines, No. 1 and No. 2, each containing an annealing furnace, identified as T1AF0794 and T2AF0799, No. 1 constructed in 1950 and No. 2 constructed in 1959, with a maximum heat input capacities of 32 and 35 MMBtu per hour, respectively. Emissions exhaust to stacks T16609 and T26610. The No. 2 Continuous Anneal Line has a cleaning section with fumes collected in a fume scrubber exhausting through a stack.

(d) Five (5) 4-Stack A Box Annealing Furnaces and 12 bases, identified as TXAF0765 through TXAF0769, constructed in 1968. All furnaces have a heat input of 10.5 MMBtu per hour each. Emissions exhaust to stacks TX6580 through TX6584.

(e) One (1) 48-inch Temper Mill, constructed in 1958, with a maximum capacity of 150 tons per hour, with fugitive emissions. This unit has a dust filter that exhausts inside the building.

(f) One (1) Double Reduction Mill with two (2) mill stands, identified as TDMO0742, constructed in 1963, with a maximum capacity of 75 tons per hour. Emissions are controlled by a mist eliminator D3603, exhausting to stack TD6595.

(g) One (1) No. 1 Tin Free Steel Line (TFS), constructed in 1950, with a maximum capacity of 24 tons per hour. The chemical treatment rinse section, TFR00753 exhaust through stack TF6597 and all other fugitive emissions from the line to roof monitor TF6661.

(h) One (1) No. 5 Electrolytic Tinning Line 5 (ETL), constructed in 1957, and with a maximum capacity of 50 tons per hour. The No. 5 ETL contains a Plating and Chemical Treatment Tank, identified as TFR00777, with fugitive emissions through Roof Monitor T56071.

(i) One (1) No. 6 Electrolytic Tinning Line (6 ETL), constructed in 1966, with a maximum capacity of 120 tons per hour. The 6 ETL also contains a Plating and Chemical Treatment Tank, identified as T6H00786, with fugitive emissions through Roof Monitor T56071.

(j) One (1) Tin Anode Caster, constructed in 1965, with a maximum capacity of 0.57 tons per hour, with fugitive emissions through roof monitor.

(k) One (1) Tin Mill Recoil and inspection Line, constructed in 1967, with a maximum capacity of 14.8 tons per hour.

(l) One (1) 45” Side Trimmer, constructed in 1961, with fugitive emissions through the roof monitor.

No. 4 Boiler House

(a) Two (2) Boilers, No. 1 and No. 2, identified as O4B10459 and O4B20460, constructed in 1967, equipped to combust natural gas, blast furnace gas and fuel oil, with a maximum heat input of 500 MMBtu per hour each, exhausting through Stacks O46268 and O46269, respectively.

(b) One (1) Boiler, No. 3, identified as O4B30461, constructed in 1967, equipped to combust blast furnace gas and natural gas, with a maximum heat input of 500 MMBtu per hour, exhausting through Stack O46270.

Turboblower Boiler House (TBBH)

(a) Three (3) Boilers, No. 1, No. 2 and No. 3, identified as OTB10462, OTB20463 and OTB30464, constructed in 1948, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a maximum heat input of 410 MMBtu per hour each, exhausting through Stacks OT6271, OT6272 and OT6273, respectively.

(b) One (1) Boiler, No. 4A, identified as OTB40465, constructed in 1990, with a maximum heat input of 244 MMBtu per hour when combusting natural gas. Emissions exhaust through Stack OT6274, with NO_X emissions monitored by a Predictive Emissions Monitoring System (PEMS).

(c) One (1) Boiler No. 5, identified as OTB50466, constructed in 1958, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a maximum heat input of 410 MMBtu per hour, exhausting through Stack OT6275.

(d) One (1) boiler, No. 6, identified as OTB60467, constructed after August 17, 1971, equipped to combust blast furnace gas and natural gas, with a maximum heat input capacity of 710 MMBtu per hour, exhausting through Stack OT6276.

Coal Pulverization and Air Preheater System

(a) One (1) coal pulverization equipment train, identified as SS-1 that consists of a pulverizer with a maximum capacity of 90 tons per hour; a preheater with a maximum heat input capacity of 37.3 MMBtu per hour, and a dual process separation cyclone, constructed in 1993, and exhausting to one baghouse with three modules (three stacks) 1A, 1B and 1C.

(b) One (1) coal pulverization equipment train, identified as SS-2 that consists of a pulverizer with a maximum capacity of 90 tons per hour; a preheater with a maximum heat input capacity of 37.3 MMBtu per hour, and a dual process separation cyclone, constructed in 1993, and exhausting to one baghouse with three modules (three stacks) 2A, 2B and 2C.

(c) One (1) coal pulverization equipment train, identified as SS-3 that consists of a pulverizer with a maximum capacity of 90 tons per hour; a preheater with a maximum heat input capacity of 37.3 MMBtu per hour, and a dual process separation cyclone, constructed in 1993, and exhausting to one baghouse with three modules (three stacks) 3A, 3B and 3C.

Pulverized Coal Storage and Feed System

(a) One (1) Pulverized coal Transport, identified as Line A, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (A) exhausting to stack (SS-5).

(b) One (1) Pulverized coal Transport, identified as Line B, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (B) exhausting to stack (SS-6).

(c) One (1) Pulverized coal storage reservoir, constructed in 1993, with a maximum capacity of 600 tons, blanketed with nitrogen and ducted to a baghouse (vent filter house) exhausting to stack (SS-7).

Railcar Heater

One (1) railcar heater system, constructed in 1993, with a maximum capacity of 14 MMBtu per hour, exhausting inside the building.

Coal Handling Operations

Coal Handling System

(a) One (1) Railcar Dumper, identified as RCD-1, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse 8AB exhausting through one or two fans to stacks 8A and/or 8B.

(b) One (1) Reclaim Hopper, identified as RCH-1, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to baghouse DC-6 and exhausting to stack DC-6.

(c) One (1) Car Dump Hopper 1/C1, identified as FS-8, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to baghouse DC-1 exhausting to stack F1.

(d) One (1) Car dump Hopper 2/C1, identified as FS-9, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-2 exhausting to stack F2.

(e) One (1) Car Dump Hopper 3/C1, identified as FS-10, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-3 exhausting to stack F3.

(f) One (1) Transfer Point C1/C2, identified as FS-2, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-4 exhausting to stack F4.

(g) One (1) Reclaim Hopper/C2, identified as FS-14, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to a baghouse DC-5 exhausting to stack F5.

(h) One (1) Screen Transfer/C2, identified as FS-3, constructed in 1993, with a maximum capacity of 600 toms per hour, ducted to a baghouse DC-7 exhausting to stack F7.

(i) One (1) Screen/C3 Gate Transfer identified as FS-11, constructed in 1993, ducted to a baghouse DC-8 exhausting to stack F8.

(j) One (1) Screen/C4 Gate Transfer, identified as FS-12, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-9 exhausting to stack F9.

(k) One (1) Transfer Point C4/C5, identified as FS-4, constructed in 1993, ducted to a baghouse DC-10 exhausting to stack F10.

East Building – Coal handling

(a) One (1) Transfer Point C5/C6, identified as FS-5, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-11 exhausting to stack F11.

(b) One (1) Transfer Point C6/Bin 1, identified as FS-7, constructed in 1993, ducted to baghouse DC-12 exhausting to stack F12.

(c) One (1) Transfer Point C5/Bin 2, identified as FS-6, constructed in 1993, ducted to baghouse DC-13 exhausting to stack F13.

(d) One (1) Transfer Point C6/Bin 3, identified as FS-13, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to baghouse DC-14 exhausting to stack F14.

Coal Piles and Haul Roads

(a) One (1) coal pile and handling operation, identified as F17, constructed in 1993, with a storage capacity of 100,000 tons and an area of 2 acres, having a maximum throughput of 200,000 tons per year.

(b) Haul Roads - Vehicle Traffic

Carbon Alloy Synthesis Plant (CASP) A

(a) Raw Material Receiving Handling and Silos A, identified as RMRHSA, approved for construction in 2010, consisting of the following:

(1) One (1) CDA1 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) baghouse (OR-A-01-DC1105), exhausting to stack OR-A-01-ST1105.

(2) One (1) CDA2 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) dust collector (OR-A-01-DC2105), exhausting to stack OR-A-01-ST2105.

(3) Five (5) dry coal storage silos, each with a storage capacity of 240 tons of dried coal, ducted to dedicated baghouses (OR-A-02-DC1070, OR-A-02-DC2070, OR-A-02-DC3070, OR-A-02-DC4070, and OR-A-02-DC5070, respectively), exhausting to stacks OR-A-02-ST1070, OR-A-02-ST2070, OR-A-02-ST3070, OR-A-02-ST4070, and OR-A-02-ST5070, respectively.

(4) Five (5) blend #1 weigh feeders, each with a rated capacity of 40 tons per hour, and one (1) drag conveyor, with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-A-03-DC1105), exhausting to stack OR-A-03-ST1105.

(5) Four (4) blend #1 feed hoppers, with a rated capacity of 30 tons per hour, and two (2) blend #1 hopper feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-A-04-DC1105), exhausting to stack OR-A-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSA facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDA1, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER A1 and FER A2 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-A-01-CY-1305) and one (1) dust collector (OR-A-01-DC1205), in series, exhausting to stack OR-A-01-ST1215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCA1, approved for construction in 2010, with a maximum capacity of 100 tons per hour, ducted to one (1) dust collector (OR-A-02-DC1105), exhausting to stack OR-A-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDA2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER A3 and FER A4 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-A-01-CY-2305) and one (1) dust collector (OR-A-01-DC2205), in series, exhausting to stack OR-A-01-ST2215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCA2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, ducted to one (1) dust collector (OR-A-02-DC2105), exhausting to stack OR-A-02-

ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERA1, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB A1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR1015), one (1) cyclone (OR-A-09-CY-1025), and one (1) baghouse (OR-A-09-DC1030), in series, exhausting to stack OR-A-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERA2, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB A2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR2015), one (1) cyclone (OR-A-09-CY-2025), and one (1) baghouse (OR-A-09-DC2030), in series, exhausting to stack OR-A-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERA3, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB A3, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR3015), one (1) cyclone (OR-A-09-CY-3025), and one (1) baghouse (OR-A-09-DC3030), in series, exhausting to stack OR-A-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERA4, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB A4, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR4015), one (1) cyclone (OR-A-09-CY-4025), and one (1) baghouse (OR-A-09-DC4030), in series, exhausting to stack OR-A-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM A1 - RCLM A4, approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FER A1 - FER A4, consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 ^{0}F - 800 ^{0}F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB A1 - FERAB A4, respectively.

(2) Four (4) coal tar surge tanks, one (1) per FER.

(k) One (1) Carborec Storage and Blending Area A, identified as CBSBA, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to a baghouse (OR-A-05-DC1205), exhausting to stack OR-A-05-ST1205.

(2) Six (6) weigh feeders, each with a rated capacity of 40 tons per hour, and blend #2 drag conveyors, each with a rated capacity of 75 tons per hour, ducted to a baghouse (OR-A-05-DC1405), exhausting to stack OR-A-05-ST1405.

(3) One (1) Carborec storage silo, with a storage capacity of 240 tons, ducted to a baghouse (OR-A-05-DC6070), exhausting to stack OR-A-05-ST6070.

(4) One (1) blend #2 surge bin, with a storage capacity of 440 tons, ducted to a baghouse (OR-A-06-DC1405), exhausting to stack OR-A-06-ST1405.

(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, each with a rated capacity of 30 tons per hour, billet belt conveyors and one (1) billet roller screener, each with a rated capacity of 80 tons per hour, and one (1) billet fines weigh feeder, with a rated capacity of 10 tons per hour, ducted to a baghouse (OR-A-06-DC1205), exhausting to stack OR-A-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

(l) One (1) billet transfer area, approved for construction in 2010, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-A-06-HP1125, with a maximum rated capacity of 10 tons per hour.

(2) Three (3) billet fines open belt conveyors, identified as OR-A-06-CB1130, OR-A-06-CB1140, and OR-A-06-CB1145, each with a maximum rated capacity of 10 tons per hour.

(3) One (1) billet belt conveyor, identified as OR-A-06-CB1110, with a maximum rated capacity of 60 tons per hour.

(4) One (1) billet hopper, identified as OR-A-06-HP1115, with a maximum storage capacity of 3 tons.

(5) Four (4) billet belt conveyors, identified as OR-A-06-CB1120, OR-A-06-CB2120, OR-A-06-CB1126, and OR-A-06-CB2126, each with a maximum rated capacity of 60 tons per hour.

(6) Two (2) billet vibratory feeders, identified as OR-A-06-VF1125 and OR-A-06-VF2125, each with a rated maximum capacity of 30 tons per hour.

(7) Two (2) trolley car loading stations, collectively identified as OR-A-06-LD1128, each with maximum capacity of 30 tons per hour.

(8) One (1) billet hopper, identified as OR-A-06-HP1135, and five (5) belt conveyors, identified as OR-A-06-CB1150, OR-A-06-CB1160, OR-A-06-CB1170, OR-A-06-CB1180, and OR-A-06-CB1190, each with a rated capacity of 30 tons per hour.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRA1, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB A1, equipped with natural gas-fired burners with a combined

maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-A-10-SR1010), one (1) cyclone (OR-A-10-CY-1115), and one (1) baghouse (OR-A-10-DC1020), in series, exhausting to stack OR-A-10-ST1025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRA2, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB A2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-A-10-SR2010), one (1) cyclone (OR-A-10-CY-2115), and one (1) baghouse (OR-A-10-DC2020), in series, exhausting to stack OR-A-10-ST2025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(o) One (1) Finish Product Handling and Loading process, approved for construction in 2010, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-A-08-CB1020, OR-A-08-CB1030, OR-A-08-CB2020, and OR-A-08-CB2030, each with a maximum rated capacity of 20 tons per hour.

(2) One (1) Cokonyx belt conveyor, identified as OR-A-08-CD1035, with a maximum rated capacity of 40 tons per hour.

(p) One (1) lime storage silo, identified as LSA, approved for construction in 2010, with a storage capacity of 50 tons of lime, equipped with one (1) dust collector (OR-A-12-DC1006), exhausting to stack OR-A-12-ST1006.

(q) Two (2) diesel-fired emergency generators, identified as EGA1 and EGA2, approved for construction in 2010, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(r) One (1) natural gas-fired emergency generator, identified as EGA3, approved for construction in 2010, with a maximum rated output of 450 kW. Under 40 CFR 60, Subpart IIII, this is considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

Carbon Alloy Synthesis Plant (CASP) Module B

(a) Raw Material Receiving Handling and Silos B, identified as RMRHSB, approved for construction in 2010, consisting of the following:

(1) One (1) CDB1 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) baghouse (OR-B-01-DC1105), exhausting to stack OR-B-01-ST1105.

(2) One (1) CDB2 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour,

ducted to one (1) dust collector (OR-B-01-DC2105), exhausting to stack OR-B-01-ST2105.

(3) Five (5) dry coal storage silos, each with a storage capacity of 240 tons of dried coal, ducted to dedicated baghouses (OR-B-02-DC1070, OR-B-02-DC2070, OR-B-02-DC3070, OR-B-02-DC4070, and OR-B-02-DC5070, respectively), exhausting to stacks OR-B-02-ST1070, OR-B-02-ST2070, OR-B-02-ST3070, OR-B-02-ST4070, and OR-B-02-ST5070, respectively.

(4) Five (5) blend #1 weigh feeders, each with a rated capacity of 40 tons per hour, and one (1) drag conveyor, with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-B-03-DC1105), exhausting to stack OR-B-03-ST1105.

(5) Four (4) blend #1 feed hoppers, with a rated capacity of 30 tons per hour, and two (2) blend #1 hopper feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-B-04-DC1105), exhausting to stack OR-B-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSB facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDB1, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER B1 and FER B2 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-B-01-CY-1305) and one (1) dust collector (OR-B-01-DC1205), in series, exhausting to stack OR-B-01-ST1215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCB1, approved for construction in 2010, with a maximum capacity of 100 tons per hour, ducted to one (1) dust collector (OR-B-02-DC1105), exhausting to stack OR-B-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDB2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER B3 and FER B4 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-B-01-CY-2305) and one (1) dust collector (OR-B-01-DC2205), in series, exhausting to stack OR-B-01-ST2215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCB2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, ducted to one (1) dust collector (OR-B-02-DC2105), exhausting to stack OR-B-02-ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB1, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB B1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-

B-09-SR1015), one (1) cyclone (ORB-09-CY-1025), and one (1) baghouse (OR-B-09-DC1030), in series, exhausting to stack OR-B-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB2, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB B2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-B-09-SR2015), one (1) cyclone (OR-B09-CY-2025), and one (1) baghouse (OR-B-09-DC2030), in series, exhausting to stack OR-B-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB3, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB B3, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-B-09-SR3015), one (1) cyclone (OR-B-09-CY-3025), and one (1) baghouse (OR-B-09-DC3030), in series, exhausting to stack OR-B-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB4, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB B4, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-B-09-SR4015), one (1) cyclone (OR-B-09-CY-4025), and one (1) baghouse (OR-B-09-DC4030), in series, exhausting to stack OR-B-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM B1 - RCLM B4, approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FER B1 - FER B4, consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 ^{0}F - 800 ^{0}F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB B1 - FERAB B4, respectively.

(2) Four (4) coal tar surge tanks, one (1) per FER.

(k) One (1) Carborec Storage and Blending Area B, identified as CBSBB, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to a baghouse (OR-B-05-DC1205), exhausting to stack OR-B-05-ST1205.

(2) Six (6) weigh feeders, each with a rated capacity of 40 tons per hour, and blend #2 drag conveyors, each with a rated capacity of 75 tons per hour, ducted to a baghouse (OR-B-05-DC1405), exhausting to stack OR-B-05-ST1405.

(3) One (1) Carborec storage silo, with a storage capacity of 240 tons, ducted to a baghouse (OR-B-05-DC6070), exhausting to stack OR-B-05-ST6070.

(4) One (1) blend #2 surge bin, with a storage capacity of 440 tons, ducted to a baghouse (OR-B-06-DC1405), exhausting to stack OR-B-06-ST1405.

(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, each with a rated capacity of 30 tons per hour, billet belt conveyors and one (1) billet roller screener, each with a rated capacity of 80 tons per hour, and one (1) billet fines weigh feeder, with a rated capacity of 10 tons per hour, ducted to a baghouse (OR-B-06-DC1205), exhausting to stack OR-B-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

(l) One (1) billet transfer area, approved for construction in 2010, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-B-06-HP1125, with a maximum rated capacity of 10 tons per hour.

(2) Three (3) billet fines open belt conveyors, identified as OR-B-06-CB1130, OR-B-06-CB1140, and OR-B-06-CB1145, each with a maximum rated capacity of 10 tons per hour.

(3) One (1) billet belt conveyor, identified as OR-B-06-CB1110, with a maximum rated capacity of 60 tons per hour.

(4) One (1) billet hopper, identified as OR-B-06-HP1115, with a maximum storage capacity of 3 tons.

(5) Four (4) billet belt conveyors, identified as OR-B-06-CB1120, OR-B-06-CB2120, OR-B-06-CB1126, and OR-B-06-CB2126, each with a maximum rated capacity of 60 tons per hour.

(6) Two (2) billet vibratory feeders, identified as OR-B-06-VF1125 and OR-B-06-VF2125, each with a rated maximum capacity of 30 tons per hour.

(7) Two (2) trolley car loading stations, collectively identified as OR-B-06-LD1128, each with maximum capacity of 30 tons per hour.

(8) One (1) billet hopper, identified as OR-B-06-HP1135, and five (5) belt conveyors, identified as OR-B-06-CB1150, OR-B-06-CB1160, OR-B-06-CB1170, OR-B-06-CB1180, and OR-B-06-CB1190, each with a rated capacity of 30 tons per hour.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRB1, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB B1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-B-10-SR1010), one (1) cyclone (OR-B-10-CY-1115), and one (1) baghouse (OR-B-10-DC1020), in series, exhausting to stack OR-B-10-ST1025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRB2, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of

Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB B2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-B-10-SR2010), one (1) cyclone (OR-B-10-CY-2115), and one (1) baghouse (OR-B-10-DC2020), in series, exhausting to stack OR-B-10-ST2025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(o) One (1) Finish Product Handling and Loading process, approved for construction in 2010, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-B-08-CB1020, OR-B-08-CB1030, OR-B-08-CB2020, and OR-B-08-CB2030, each with a maximum rated capacity of 20 tons per hour.

(2) One (1) Cokonyx belt conveyor, identified as OR-B-08-CD1035, with a maximum rated capacity of 40 tons per hour.

(p) One (1) lime storage silo, identified as LSB, approved for construction in 2010, with a storage capacity of 50 tons of lime, equipped with one (1) dust collector (OR-B-12-DC1006), exhausting to stack OR-B-12-ST1006.

(q) Two (2) diesel-fired emergency generators, identified as EGB1 and EGB2, approved for construction in 2010, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(r) One (1) natural gas-fired emergency generator, identified as EGB3, approved for construction in 2010, with a maximum rated output of 450 kW. Under 40 CFR 60, Subpart IIII, this is considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

Carbon Alloy Synthesis Plant (CASP) Module C

(a) Raw Material Receiving Handling and Silos C, identified as RMRHSC, approved for construction in 2010, consisting of the following:

(1) One (1) CDC1 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) baghouse (OR-C-01-DC1105), exhausting to stack OR-C-01-ST1105.

(2) One (1) CDC2 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) dust collector (OR-C-01-DC2105), exhausting to stack OR-C-01-ST2105.

(3) Five (5) dry coal storage silos, each with a storage capacity of 240 tons of dried coal, ducted to dedicated baghouses (OR-C-02-DC1070, OR-C-02-DC2070, OR-C-02-DC3070, OR-C-02-DC4070, and OR-C-02-DC5070, respectively), exhausting to stacks OR-C-02-ST1070, OR-C-02-ST2070, OR-C-02-ST3070, OR-C-02-ST4070, and OR-C-02-ST5070, respectively.

(4) Five (5) blend #1 weigh feeders, each with a rated capacity of 40 tons per hour, and one (1) drag conveyor, with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-C-03-DC1105), exhausting to stack OR-C-03-ST1105.

(5) Four (4) blend #1 feed hoppers, with a rated capacity of 30 tons per hour, and two (2) blend #1 hopper feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-C-04-DC1105), exhausting to stack OR-C-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSC facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDC1, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER C1 and FER C2 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-C-01-CY-1305) and one (1) dust collector (OR-C-01-DC1205), in series, exhausting to stack OR-C-01-ST1215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCC1, approved for construction in 2010, with a maximum capacity of 100 tons per hour, ducted to one (1) dust collector (OR-C-02-DC1105), exhausting to stack OR-C-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDC2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER C3 and FER C4 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-C-01-CY-2305) and one (1) dust collector (OR-C-01-DC2205), in series, exhausting to stack OR-C-01-ST2215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCC2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, ducted to one (1) dust collector (OR-C-02-DC2105), exhausting to stack OR-C-02-ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC1, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB C1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-C-09-SR1015), one (1) cyclone (OR-C-09-CY-1025), and one (1) baghouse (OR-C-09-DC1030), in series, exhausting to stack OR-C-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC2, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB C2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-

C-09-SR2015), one (1) cyclone (OR-C-09-CY-2025), and one (1) baghouse (OR-C-09-DC2030), in series, exhausting to stack OR-C-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC3, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB C3, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-C-09-SR3015), one (1) cyclone (OR-C -09-CY-3025), and one (1) baghouse (OR-C-09-DC3030), in series, exhausting to stack OR-C-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC4, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB C4, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-C-09-SR4015), one (1) cyclone (OR-C-09-CY-4025), and one (1) baghouse (OR-C-09-DC4030), in series, exhausting to stack OR-C-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM C1 - RCLM C4, approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FER C1 - FER C4, consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 ^{0}F - 800 ^{0}F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB C1 - FERAB C4, respectively.

(2) Four (4) coal tar surge tanks, one (1) per FER.

(k) One (1) Carborec Storage and Blending Area C, identified as CBSBC, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to a baghouse (OR-C-05-DC1205), exhausting to stack OR-C-05-ST1205.

(2) Six (6) weigh feeders, each with a rated capacity of 40 tons per hour, and blend #2 drag conveyors, each with a rated capacity of 75 tons per hour, ducted to a baghouse (OR-C-05-DC1405), exhausting to stack OR-C-05-ST1405.

(3) One (1) Carborec storage silo, with a storage capacity of 240 tons, ducted to a baghouse (OR-C-05-DC6070), exhausting to stack OR-C-05-ST6070.

(4) One (1) blend #2 surge bin, with a storage capacity of 440 tons, ducted to a baghouse (OR-C-06-DC1405), exhausting to stack OR-C-06-ST1405.

(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, each with a rated capacity of 30 tons per hour, billet belt conveyors and one (1) billet roller screener, each with a rated capacity of 80 tons per hour, and one (1) billet fines weigh feeder, with a rated capacity of 10 tons per hour, ducted to a baghouse (OR-C-06-DC1205), exhausting to stack OR-C-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

(l) One (1) billet transfer area, approved for construction in 2010, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-C-06-HP1125, with a maximum rated capacity of 10 tons per hour.

(2) Three (3) billet fines open belt conveyors, identified as OR-C-06-CB1130, OR-C-06-CB1140, and OR-C-06-CB1145, each with a maximum rated capacity of 10 tons per hour.

(3) One (1) billet belt conveyor, identified as OR-C-06-CB1110, with a maximum rated capacity of 60 tons per hour.

(4) One (1) billet hopper, identified as OR-C-06-HP1115, with a maximum storage capacity of 3 tons.

(5) Four (4) billet belt conveyors, identified as OR-C-06-CB1120, OR-C-06-CB2120, OR-C-06-CB1126, and OR-C-06-CB2126, each with a maximum rated capacity of 60 tons per hour.

(6) Two (2) billet vibratory feeders, identified as OR-C-06-VF1125 and OR-C-06-VF2125, each with a rated maximum capacity of 30 tons per hour.

(7) Two (2) trolley car loading stations, collectively identified as OR-C-06-LD1128, each with maximum capacity of 30 tons per hour.

(8) One (1) billet hopper, identified as OR-C-06-HP1135, and five (5) belt conveyors, identified as OR-C-06-CB1150, OR-C-06-CB1160, OR-C-06-CB1170, OR-C-06-CB1180, and OR-C-06-CB1190, each with a rated capacity of 30 tons per hour.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRC1, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB C1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-C-10-SR1010), one (1) cyclone (OR-C-10-CY-1115), and one (1) baghouse (OR-C-10-DC1020), in series, exhausting to stack OR-C-10-ST1025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRC2, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB C2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-C-10-SR2010), one (1) cyclone (OR-C-10-CY-2115), and one (1) baghouse (OR-C-10-DC2020), in series, exhausting to stack OR-C-10-ST2025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(o) One (1) Finish Product Handling and Loading process, approved for construction in 2010, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-C-08-CB1020, OR-C-08-CB1030, OR-C-08-CB2020, and OR-C-08-CB2030, each with a maximum rated capacity of 20 tons per hour.

(2) One (1) Cokonyx belt conveyor, identified as OR-C-08-CD1035, with a maximum rated capacity of 40 tons per hour.

(p) One (1) lime storage silo, identified as LSC, approved for construction in 2010, with a storage capacity of 50 tons of lime, equipped with one (1) dust collector (OR-C-12-DC1006), exhausting to stack OR-C-12-ST1006.

(q) Two (2) diesel-fired emergency generators, identified as EGC1 and EGC2, approved for construction in 2010, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(r) One (1) natural gas-fired emergency generator, identified as EGC3, approved for construction in 2010, with a maximum rated output of 450 kW. Under 40 CFR 60, Subpart IIII, this is considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

Carbon Alloy Synthesis Plant (CASP) Module D

(a) Raw Material Receiving Handling and Silos D, identified as RMRHSD, approved for construction in 2010, consisting of the following:

(1) One (1) CDD1 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) baghouse (OR-D-01-DC1105), exhausting to stack OR-D-01-ST1105.

(2) One (1) CDD2 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) dust collector (OR-D-01-DC2105), exhausting to stack OR-D-01-ST2105.

(3) Five (5) dry coal storage silos, each with a storage capacity of 240 tons of dried coal, ducted to dedicated baghouses (OR-D-02-DC1070, OR-D-02-DC2070, OR-D-02-DC3070, OR-D-02-DC4070, and OR-D-02-DC5070, respectively), exhausting to stacks OR-D-02-ST1070, OR-D-02-ST2070, OR-D-02-ST3070, OR-D-02-ST4070, and OR-D-02-ST5070, respectively.

(4) Five (5) blend #1 weigh feeders, each with a rated capacity of 40 tons per hour, and one (1) drag conveyor, with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-D-03-DC1105), exhausting to stack OR-D-03-ST1105.

(5) Four (4) blend #1 feed hoppers, with a rated capacity of 30 tons per hour, and two (2) blend #1 hopper feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-D-04-DC1105), exhausting to stack OR-D-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSD facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDD1, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER D1 and FER D2 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-D-01-CY-1305) and one (1) dust collector (OR-D-01-DC1205), in series, exhausting to stack OR-D-01-ST1215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCD1, approved for construction in 2010, with a maximum capacity of 100 tons per hour, ducted to one (1) dust collector (OR-D-02-DC1105), exhausting to stack OR-D-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDD2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER D3 and FER D4 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-D-01-CY-2305) and one (1) dust collector (OR-D-01-DC2205), in series, exhausting to stack OR-D-01-ST2215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCD2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, ducted to one (1) dust collector (OR-D-02-DC2105), exhausting to stack OR-D-02-ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD1, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB D1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-D-09-SR1015), one (1) cyclone (OR-D-09-CY-1025), and one (1) baghouse (OR-D-09-DC1030), in series, exhausting to stack OR-D-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD2, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB D2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-D-09-SR2015), one (1) cyclone (OR-D -09-CY-2025), and one (1) baghouse (OR-D-09-DC2030), in series, exhausting to stack OR-D-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD3, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB D3, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-

D-09-SR3015), one (1) cyclone (OR-D-09-CY-3025), and one (1) baghouse (OR-D-09-DC3030), in series, exhausting to stack OR-D-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD4, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB D4, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-D-09-SR4015), one (1) cyclone (OR-D-09-CY-4025), and one (1) baghouse (OR-D-09-DC4030), in series, exhausting to stack OR-D-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM D1- RCLM D4 approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FER D1 - FER D4 consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 ^{0}F - 800 ^{0}F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB D1 - FERAB D4 respectively.

(2) Four (4) coal tar surge tanks, one (1) per FER.

(k) One (1) Carborec Storage and Blending Area D, identified as CBSBD, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to a baghouse (OR-D-05-DC1205), exhausting to stack OR-D-05-ST1205.

(2) Six (6) weigh feeders, each with a rated capacity of 40 tons per hour, and blend #2 drag conveyors, each with a rated capacity of 75 tons per hour, ducted to a baghouse (OR-D-05-DC1405), exhausting to stack OR-D-05-ST1405.

(3) One (1) Carborec storage silo, with a storage capacity of 240 tons, ducted to a baghouse (OR-D-05-DC6070), exhausting to stack OR-D-05-ST6070.

(4) One (1) blend #2 surge bin, with a storage capacity of 440 tons, ducted to a baghouse (OR-D-06-DC1405), exhausting to stack OR-D-06-ST1405.

(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, each with a rated capacity of 30 tons per hour, billet belt conveyors and one (1) billet roller screener, each with a rated capacity of 80 tons per hour, and one (1) billet fines weigh feeder, with a rated capacity of 10 tons per hour, ducted to a baghouse (OR-D-06-DC1205), exhausting to stack OR-D-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

(l) One (1) billet transfer area, approved for construction in 2010, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-D-06-HP1125, with a maximum rated capacity of 10 tons per hour.

(2) Three (3) billet fines open belt conveyors, identified as OR-D-06-CB1130, OR-D-06-CB1140, and OR-D-06-CB1145, each with a maximum rated capacity of 10 tons per hour.

(3) One (1) billet belt conveyor, identified as OR-D-06-CB1110, with a maximum rated capacity of 60 tons per hour.

(4) One (1) billet hopper, identified as OR-D-06-HP1115, with a maximum storage capacity of 3 tons.

(5) Four (4) billet belt conveyors, identified as OR-D-06-CB1120, OR-D-06-CB2120, OR-D-06-CB1126, and OR-D-06-CB2126, each with a maximum rated capacity of 60 tons per hour.

(6) Two (2) billet vibratory feeders, identified as OR-D-06-VF1125 and OR-D-06-VF2125, each with a rated maximum capacity of 30 tons per hour.

(7) Two (2) trolley car loading stations, collectively identified as OR-D-06-LD1128, each with maximum capacity of 30 tons per hour.

(8) One (1) billet hopper, identified as OR-D-06-HP1135, and five (5) belt conveyors, identified as OR-D-06-CB1150, OR-D-06-CB1160, OR-D-06-CB1170, OR-D-06-CB1180, and OR-D-06-CB1190, each with a rated capacity of 30 tons per hour.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRD1, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB D1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-D-10-SR1010), one (1) cyclone (OR-D-10-CY-1115), and one (1) baghouse (OR-D-10-DC1020), in series, exhausting to stack OR-D-10-ST1025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRD2, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB D2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-D-10-SR2010), one (1) cyclone (OR-D-10-CY-2115), and one (1) baghouse (OR-D-10-DC2020), in series, exhausting to stack OR-D-10-ST2025.

(o) One (1) Finish Product Handling and Loading process, approved for construction in 2010, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-D-08-CB1020, OR-D-08-CB1030, OR-D-08-CB2020, and OR-D-08-CB2030, each with a maximum rated capacity of 20 tons per hour.

(2) One (1) Cokonyx belt conveyor, identified as OR-D-08-CD1035, with a maximum rated capacity of 40 tons per hour.

(p) One (1) lime storage silo, identified as LSD, approved for construction in 2010, with a storage capacity of 50 tons of lime, equipped with one (1) dust collector (OR-D-12-DC1006), exhausting to stack OR-D-12-ST1006.

(q) Two (2) diesel-fired emergency generators, identified as EGD1 and EGD2, approved for construction in 2010, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(r) One (1) natural gas-fired emergency generator, identified as EGD3, approved for construction in 2010, with a maximum rated output of 450 kW. Under 40 CFR 60, Subpart IIII, this is considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

CASP Coal Receiving and Handling

(a) Phase 1 CASP C and CASP D coal handling, approved for construction in 2010, consisting of the following:

(1) One (1) feed hopper and conveyor No.1 (PHS1-HC1), with a maximum rated capacity of 100 tons per hour, with emissions uncontrolled.

(2) Two (2) CASP C coal conveyors, identified as PHS1C-C1 and PHS1C-C2, each with a maximum rate of 100 tons per hour, with emissions uncontrolled.

(3) One (1) CASP C coal feed hopper No.2, identified as CASPC-FH2, with a maximum rate of 100 tons per hour, with hopper receiving emissions uncontrolled.

(4) Two (2) CASP D coal conveyors, identified as PHS1D-C1 and PHS1D-C2, each with a maximum rate of 100 tons per hour, with emissions uncontrolled.

(5) One (1) CASP D coal feed hopper No.2, identified as CASPD-FH2, with a maximum rate of 100 tons per hour, with hopper receiving emissions uncontrolled.

(b) Phase 2 CASP coal handling, approved for construction in 2010, consisting of the following:

(1) Two (2) CASP coal conveyors, identified as CASP-C1 and CASP-C2, each with a maximum rate of 100 tons per hour, with emissions uncontrolled.

(2) One (1) CASP rotary stacker CASP-RS1, with a maximum rate of 200 tons per hour, with emissions uncontrolled.

(3) Four (4) CASP coal conveyor feed hoppers No.1, identified as CASPA-FH1, CASPB-FH1, CASPC-FH1, and CASPD-FH1, each with a maximum rate of 100 tons per hour, with emissions uncontrolled.

(4) Two (2) CASP A coal conveyors, identified as CASPA-C1 and CASPA-C2, each with a maximum rated capacity of 100 tons per hour, with emissions uncontrolled.

(5) One (1) CASP A coal feed hopper No.2, identified as CASPA-FH2, with a maximum rate of 100 tons per hour, with hopper receiving emissions uncontrolled.

(6) Two (2) CASP B coal conveyors, identified as CASPB-C1 and CASPB-C2, each with a maximum rated capacity of 100 tons per hour, with emissions uncontrolled.

(7) One (1) CASP B coal feed hopper No.2, identified as CASPB-FH2, with a maximum rate of 100 tons per hour, with hopper receiving emissions uncontrolled.

(8) Two (2) CASP C coal conveyors, identified as CASPC-C1 and CASPC-C2, each with a maximum rated capacity of 100 tons per hour, with emissions uncontrolled.

(9) Two (2) CASP D coal conveyors, identified as CASPD-C1 and CASPD-C2, each with a maximum rated capacity of 100 tons per hour, with emissions uncontrolled.

Under 40 CFR 60, Subpart Y, the CASP Raw Material Receiving and Handling facilities are considered coal processing and conveying equipment, and coal storage systems.

(c) Storage Piles

(1) One (1) PHS1 intermediate coal storage pile No. 1, with a storage capacity of 0.25 acres.
(2) Four (4) PHS1 coal storage piles, with a combined storage capacity of 3.6 acres.
(3) One (1) PHS1 intermediate coal storage pile No. 2, with a storage capacity of 0.25 acres.
(4) Four (4) CASP coal storage piles, with a combined a storage capacity of 3.6 acres.

Under 40 CFR 60, Subpart Y, these storage piles are each considered open storage piles.

CASP Cokonyx Loadout

(a) Two (2) single deck vibratory screener feeders for CASP A, identified as CASPA-VF1 and CASPA-VF2, approved for construction in 2010, each with a maximum rated capacity of 20 tons per hour, with emissions uncontrolled.

(b) Two (2) single deck vibratory screener feeders for CASP B, identified as CASPB-VF1 and CASPB-VF2, approved for construction in 2010, each with a maximum rated capacity of 20 tons per hour, with emissions uncontrolled.

(c) Two (2) single deck vibratory screener feeders for CASP C, identified as CASPC-VF1 and CASPC-VF2, approved for construction in 2010, each with a maximum rated capacity of 20 tons per hour, with emissions uncontrolled.

(d) Two (2) single deck vibratory screener feeders for CASP D, identified as CASPD-VF1 and CASPD-VF2, approved for construction in 2010, each with a maximum rated capacity of 20 tons per hour, with emissions uncontrolled.

(e) Two (2) emergency product by-pass bunkers for CASP A, identified as CASPA-EB1 and CASPA-EB2, approved for construction in 2010, with emissions uncontrolled.

(f) Two (2) emergency product by-pass bunkers for CASP B, identified as CASPB-EB1 and CASPB-EB2, approved for construction in 2010, with emissions uncontrolled.

(g) Two (2) emergency product by-pass bunkers for CASP C, identified as CASPC-EB1 and CASPC-EB2, approved for construction in 2010, with emissions uncontrolled.

(h) Two (2) emergency product by-pass bunkers for CASP D, identified as CASPD-EB1 and CASPD-EB2, approved for construction in 2010, with emissions uncontrolled.

(i) Two (2) Cokonyx loadout conveyors for CASP A, identified as CKNXC-A1 and CKNXC-A2, approved for construction in 2010, each with a maximum capacity of 20 tons of Cokonyx per hour, with emissions uncontrolled.

(j) Two (2) Cokonyx loadout conveyors for CASP B, identified as CKNXC-B1 and CKNXC-B2, approved for construction in 2010, each with a maximum capacity of 20 tons of Cokonyx per hour, with emissions uncontrolled.

(k) Two (2) Cokonyx loadout conveyors for CASP C, identified as CKNXC-C1 and CKNXC-C2, approved for construction in 2010, each with a maximum capacity of 20 tons of Cokonyx per hour, with emissions uncontrolled.

(l) Two (2) Cokonyx loadout conveyors for CASP D, identified as CKNXC-D1 and CKNXC-D2, approved for construction in 2010, each with a maximum capacity of 20 tons of Cokonyx per hour, with emissions uncontrolled.

(m) One (1) C/D Cokonyx conveyor, identified as CKNXC-C/D, approved for construction in 2010, with a maximum capacity of 57 tons of Cokonyx per hour, with emissions uncontrolled.

(n) One (1) A/B Cokonyx conveyor, identified as CKNXC-A/B, approved for construction in 2010, with a maximum capacity of 57 tons of Cokonyx per hour, with emissions uncontrolled.

(o) Two (2) C/D Cokonyx surge bins, collectively identified as CKNXBin-C/D1, approved for construction in 2010, with a maximum capacity of 147 tons per bin, with emissions uncontrolled.

(p) Two (2) A/B Cokonyx surge bins, collectively identified as CKNXBin-A/B1, approved for construction in 2010, with a maximum storage capacity of 147 tons per silo, with emissions uncontrolled.

(q) Storage Piles

(1) CASP A/B Cokonyx Emergency Storage Pile, with a storage capacity of 0.02 acres.

(2) CASP C/D Cokonyx Emergency Storage Pile, with a storage capacity of 0.02 acres.

Fugitive Dust Sources consisting of, but not limited to, the following:

(a) Paved Roads and Parking Lots

(b) Unpaved Roads and Parking Lots

(c) Batch Transfer-Loading and Unloading Operations

(d) Continuous Transfer In and Out of Storage Piles

(e) Batch Transfer Operations-Slag and Kish Handling

(f) Wind Erosion from Storage Piles and Open Areas

(g) In Plant Transfer by Truck or Rail

(h) In Plant Transfer by Front End Loader or Skip Hoist

(i) Material Processing Facility

(j) Crusher Fugitive Emissions

(k) Material Processing Facility Building Openings

(l) Dust Handling Equipment

A.4 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

(a) Specifically regulated insignificant activities:

(1) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-5][326 IAC 8-3-6][326 IAC 8-9-1]

(2) Cleaners and solvents characterized as follows:

(A) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38°C (100°F) or;

(B) Having a vapor pressure equal to or less than 0.7 kPA; 5mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.[326 IAC 8-3-5][326 IAC 8-3-6][326 IAC 8-9-1]

(3) The following VOC and HAP storage containers:

(A) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons. [326 IAC 8-9-1]

(B) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids. [326 IAC 8-9-1]

(4) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6.8-10-3]

(5) Any of the following structural steel and bridge fabrication activities:

(A) Cutting 200,000 linear feet or less of one inch (10) plate or equivalent.

(B) Using 80 tons or less of welding consumables. [326 IAC 6.8-10-3]

(6) Conveyors as follows:

(A) Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day; [326 IAC 6.8-10-3]

(B) Uncovered coal conveying of less than or equal to 120 tons per day. [326 IAC 6.8-10-3]

(7) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6.8-10-3]

(8) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6.8-10-3]

(9) Vents from ash transport systems not operated at positive pressure. [326 IAC 6.8-10-3)]

(10) Fuel dispensing activities, including the following:

(A) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment. [326 IAC 8-9-1]

(B) A petroleum fuel other than gasoline dispensing facility, having a storage tank capacity less than or equal to ten thousand five hundred (10,500) gallons, and dispensing three thousand five hundred (3,500) gallons per day or less. A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, dispensing less than or equal to 230,000 gallons per month. [326 IAC 8-9-1]

(b) Specifically regulated insignificant activities (former Gary Coal Processing, LP):

(1) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.[326 IAC 8-3-5][326 IAC 8-3-8]

(2) Cleaners and solvents characterized as follows:

(A) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38°C (100°F) or;

(B) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months. [326 IAC 8-3-2] [326 IAC 8-3-5] [326 IAC 8-3-8]

(3) One (1) 5, 000 gallon #2 diesel fuel tank - A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month. [326 IAC 8-9-1]

(c) Other Insignificant Activities

(1) Space heaters, process heaters, or boilers using the following fuels:

(A) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.

(B) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing equal or less than five-tenths percent (0.5%) sulfur by weight.

(2) Equipment powered by diesel fuel fired or natural gas fired internal combustion engines of capacity equal to or less than five hundred thousand (500,000) British thermal units per hour except where total capacity of equipment operated by one (1) stationary source as defined by subdivision (38) exceeds two million (2,000,000) British thermal units per hour.

(3) Combustion source flame safety purging on startup.

(4) Refractory storage not requiring air pollution control equipment.

(5) Equipment used exclusively for the following:

(A) Packaging lubricants and greases.

(B) Filling drums, pails, or other packaging containers with the following: Lubricating oils, Waxes and Greases.

(6) Application of: oils; greases; lubricants; and nonvolatile material; as temporary protective coatings.

(7) Closed loop heating and cooling systems.

(8) Rolling oil recovery systems.

(9) Groundwater oil recovery wells.

(10) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

(11) Water runoff ponds for petroleum coke-cutting and coke storage piles.

(12) Any operation using aqueous solutions containing less than 1% by weight of VOCs, excluding HAPS.

(13) Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPs.

(14) Noncontact cooling tower systems with forced or induced draft cooling tower system not regulated under a NESHAP.

(15) Quenching operations used with heat treating operations.

(16) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(17) Heat exchanger cleaning and repair.

(18) Process vessel degassing and cleaning to prepare for internal repairs.

(19) Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal.

(20) Paved and unpaved roads and parking lots with public access.

(21) Underground conveyors.

(22) Asbestos abatement projects regulated by 326 IAC 14-10.

(23) Purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.

(24) Flue gas conditioning systems and associated chemicals, such as the following: sodium sulfate, ammonia and sulfur trioxide.

(25) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

(26) Blow down for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(27) Activities associated with emergencies, including the following:

(A) On-site fire training approved by the department.

(B) Emergency generators as follows: Gasoline generators not exceeding one hundred ten (110) horsepower, Diesel generators not exceeding one thousand six hundred (1,600) horsepower and natural gas turbines or reciprocating engines not exceeding one thousand six hundred (1,600) horsepower.

(C) Stationary fire pumps.

(28) Purge double block and bleed valves.

(29) A laboratory as defined in 326 IAC 2-7-1(21)(D).

(30) RCRA groundwater remediation system, identified as GWRP-1 which includes eleven (11) recirculation wells to remove benzene from groundwater through a combination of in-situ air sparging, air stripping and vapor extraction.

(d) Specifically regulated insignificant activities (Carbon Alloy Synthesis Plants):

CASP Module A

(1) One (1) lubricating oil storage tank, identified as STO3 A, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 A, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT A1 and PFRCT A2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPA, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 60, Subpart IIII, this is considered a fire pump stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

(5) One (1) coal tar storage tank, identified as STO1 A, approved for construction in 2010, with a storage capacity of 10,000 gallons.

CASP Module B

(1) One (1) lubricating oil storage tank, identified as STO3 B, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 B, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT B1 and PFRCT B2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPB, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 60, Subpart IIII, this is considered a fire pump stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

(5) Two (2) coal tar storage tanks, identified as STO1 B and STO2 B, approved for construction in 2010, each with a storage capacity of 10,000 gallons.

CASP Module C

(1) One (1) lubricating oil storage tank, identified as STO3 C, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 C, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT C and PFRCT C2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPC, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 60, Subpart IIII, this is considered a fire pump stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

(5) Two (2) coal tar storage tanks, identified as STO1 C and STO2 C, approved for construction in 2010, each with a storage capacity of 10,000 gallons.

CASP Module D

(1) One (1) lubricating oil storage tank, identified as STO3 D, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 D, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT D1 and PFRCT D2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPD, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 60, Subpart IIII, this is considered a fire pump stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

(5) One (1) coal tar storage tank, identified as STO1 D, approved for construction in 2010, with a storage capacity of 10,000 gallons.

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

This integrated steel mill is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]

(a) This permit, T089-7663-00121, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit or of permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

(i) it contains a certification by a "responsible official", as defined by 326 IAC 2-7-1 (34), and

(ii) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) The Permittee may use the attached Certification Form, or its equivalent, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) A "responsible official" is defined at 326 IAC 2-7-1(34).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)][326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

The Permittee shall implement the PMPs.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the

affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]

(a) All terms and conditions of permits established prior to T089-7663-00121 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised under 326 IAC 2-7-10.5, or

(3) deleted under 326 IAC 2-7-10.5.

(b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit, except for permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control)

B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12] [40 CFR 72]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

(a) No Part 70 permit revision or notice shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b),(c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

(f) This condition does not apply to emission trades of SO_2 or NO_X under 326 IAC 21 or 326 IAC 10-4.

B.20 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee’s right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as

such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.24 Advanced Source Modification Approval [326 IAC 2-7-5(16)] [326 IAC 2-7-10.5]

(a) The requirements to obtain a source modification approval under 326 IAC 2-7-10.5 or a permit modification under 326 IAC 2-7-12 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3.

(b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction, work is suspended for a continuous period of one (1) year or more.

B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.2 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.5 Fugitive Dust Emissions [326 IAC 6.8-10-3]

Pursuant to 326 IAC 6.8-10-3 (formerly 326 IAC 6-1-11.1) (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

(a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).

(b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).

(c) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.

(d) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

(e) There shall be a zero (0) percent frequency of visible emission observations of a material during the in plant transportation of material by truck or rail at any time.

(f) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).

(g) Material processing facilities shall include the following:

(1) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.

(2) The PM_{10} emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(3) The PM_{10} stack emissions from a material processing facility shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(4) The opacity of fugitive particulate emissions from the material processing facilities, except crusher at which a capture system is not used, shall not exceed ten percent (10%) opacity.

(5) The opacity of fugitive particulate emission from a crusher at which a capture system is not used shall not exceed fifteen percent (15%).

(h) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

(i) Material transfer limits shall be as follows:

(1) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

(2) Where adequate wetting of the material for fugitive particulate emissions control is prohibitive to further processing or reuse of the material, the opacity shall not exceed ten percent (10%), three (3) minute average.

(3) Slag and kish handling activities at integrated iron and steel plants shall comply with the following particulate emissions limits:

(A) The opacity of fugitive particulate emissions from transfer from pots and trucks into pits shall not exceed twenty percent (20%) on a six (6) minute average.

(B) The opacity of fugitive particulate emissions from transfer from pits into front end loaders and from transfer from front end loaders into trucks shall comply with the fugitive particulate emission limits in 326 IAC 6.8-10-3(9).

(j) Any facility or operation not specified in 326 IAC 6.8-10-3 shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the attached Fugitive Dust Control Plan submitted on March 1, 2003.

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25)

tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.8 Performance Testing [326 IAC 3-6]

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

C.9 Sulfur Fuel Sampling and Analysis (Entire Source) [326 IAC 7-4.1-2]

Pursuant to 326 IAC 7-4.1-2 and in order to comply with sulfur dioxide limitations in the applicable D sections, the Permittee shall submit a sampling and analysis protocol to the Department by July 1, 2006.

(a) The protocol shall contain a description of planned procedures for:

(1) sampling of sulfur-bearing fuels and materials;

(2) analysis of the sulfur content; and

(3) any planned direct measurement of sulfur dioxide emissions vented to the atmosphere; and

(b) Specify the frequency of sampling, analysis, and measurement for each fuel and material and for each emissions unit.

(c) The protocol may be revised as necessary with approval by IDEM-OAQ.

(d) IDEM, OAQ may also require that a source conduct a stack test at any facility listed in this permit within sixty (60) days of written notification by the IDEM-OAQ.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require a certification that meet the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.12 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous opacity monitoring systems (COMS) and related equipment. For a boiler, the COMS shall be in operation at all times that the induced draft fan is in operation.

(b) All COMS shall meet the performance specifications of 40 CFR 60, Appendix B, Performance Specification No. 1, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5.

(c) In the event that a breakdown of a COMS occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.

(d) Whenever a COMS is malfunctioning or is down for maintenance or repairs for a period of twenty-four (24) hours or more and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMS, the Permittee shall provide a certified opacity reader, who may be an employee of the Permittee or an independent contractor, to self-monitor the emissions from the emission unit stack.

(1) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.

(2) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least twice per day during daylight operations, with at least four (4) hours between each set of readings, until a COMS is online.

(3) Method 9 readings may be discontinued once a COMS is online.

(4) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.

(e) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5, (and 40 CFR 60 and/or 40 CFR 63).

C.13 Continuous Compliance Plan (CCP) [326 IAC 6.8-8-1] [326 IAC 6.8-8-8]

(a) Pursuant to 326 IAC 6.8-8-1, the Permittee shall submit to IDEM and maintain at source a copy of the Continuous Compliance Plan (CCP). The Permittee shall perform the inspections, monitoring and record keeping in accordance with the information in 326 IAC 6.8-8-5 through 326 IAC 6.8-8-7 or applicable procedures in the CCP.

(b) Pursuant to 326 IAC 6.8-8-8, the Permittee shall update the CCP, as needed, retain a copy any changes and updates to the CCP at the source and make the updated CCP available for inspection by the department. If required by IDEM, OAQ, the Permittee shall submit the updated CCP to IDEM, OAQ within thirty (30) days of the update.

(c) Pursuant to 326 IAC 6.8-8, failure to submit a CCP, maintain all information required by the CCP at the source, or submit updates, to a CCP is a violation of 326 IAC 6.8-8.

C.14 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.15 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]

C.16 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on October 5, 1996 for initial approval by IDEM.

(b) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the latest IDEM approved version of the ERP for the appropriate episode level. [326 IAC 1-5-3]

C.17 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.18 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to-normal or usual manner of operation.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall record the reasonable responses steps taken.

C.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.20 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

(c) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or

326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

(1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, document and maintain the following records:

(A) A description of the project.

(B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.

(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:

(i) Baseline actual emissions;

(ii) Projected actual emissions;

(iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(d) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

(1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and

(2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.22 Sulfur Record keeping Requirements (Entire Source) [326 IAC 7-4.1-20(c)(1)]

Pursuant to 326 IAC 7-4.1-20(c)(1), the Permittee shall record and make available to IDEM, upon request, process and fuel use information pertaining to each emissions unit, process, or combustion unit identified in this section, including the following:

(a) Identification of the applicable limit.

(b) The amount and type each fuel used for each facility for each calendar day of operation.

(c) The operating scenario chosen for the U.S. Steel – Gary Works.

(d) The hourly sulfur dioxide emission rate in pounds of sulfur dioxide per hour calculated by dividing the total daily sulfur dioxide emissions in pounds of sulfur dioxide per day by twenty-four (24) hours.

(e) The hourly sulfur dioxide emission rate in pounds of sulfur dioxide per MMBtu for those facilities with a pounds per MMBtu limit in this rule calculated by dividing the total daily sulfur dioxide emissions in pounds of sulfur dioxide per day by the total heat input per day in MMBtu.

C.23 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2][326 IAC 2-3]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meet*s* the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(b) The address for report submittal is:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted no later than thirty (30) days of the end of the reporting period. All reports do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(e) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

(f) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any “project” (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:

(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and

(2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).

(g) The report for project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:

(1) The name, address, and telephone number of the major stationary source.

(2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.

(3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).

(4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(h) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

C.24 Sulfur Dioxide (SO2) Reporting Requirements (Entire Source) [326 IAC 7-4.1-20(c)(2)]

Pursuant to 326 IAC 7-4.1-20(c)(2), the Permittee shall submit an exception report to IDEM, OAQ, within thirty (30) days of an exceedance of the limitations in this permit that included the following:

(a) Identification of the applicable limit or limits being exceeded.

(b) Identification of any emissions unit exceeding the applicable limit and the dates when the limits were exceeded.

(c) The calculated sulfur dioxide emission rate in pounds per hour for each facility exceeding the limitations for the days that the pounds per hour limitations were exceeded.

(d) The calculated sulfur dioxide emission rate in pounds per million Btu for each combustion unit, furnace, boiler, or process operation for each facility exceeding the pounds per million Btu limitation for the days that the limitations were exceeded.

(e) The actual daily fuel usage for each combustion unit, furnace, boiler, or process operation for each facility exceeding the limitations for the days that the limitations were exceeded.

Stratospheric Ozone Protection

C.25 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with applicable standards for recycling and emissions reduction.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: One (1) Coal Handling Operation

(a) One (1) coal car bottom thaw shed (holding yard), identified as CHY00071, constructed in 1959, combusting coke oven gas, with a maximum heat input capacity of 25 MMBtu per hour, with an open flame heater, with uncontrolled fugitive emissions.

(b) One (1) coal car side thaw station, identified as CHT0001, constructed in 1959, combusting natural gas, with a maximum heat input capacity of 15 MMBtu per hour, with an open flame heater, with uncontrolled fugitive emissions.

(c) One (1) No. 2 Coke Battery Precarbonization facility, consisting of three (3) lines, Line A, Line B and Line C identified as CH2A0020, CH2B0021 and CH2C0022, constructed prior to October 24, 1974, each with a maximum capacity of 153.5 tons per hour. Particulate matter emissions from the three lines are controlled by electrostatic precipitators (ESP), ESP A, ESP B and ESP C, identified as CH3029, CH3030 and CH3031, exhausting through stacks CH6034, CH6035 and CH6037, respectively.

(d) One (1) No. 3 Coke Battery Precarbonization facility consisting of three (3) lines Line A, Line B and Line C identified as CH3A0017, CH3B0018 and CH3C0019, constructed prior to October 24, 1974, each with a maximum capacity of 153.5 tons per hour. Particulate matter emissions from the three lines are controlled by electrostatic precipitators (ESP), ESP A, ESP B and ESP C, CH3026, CH3027 and CH3028, exhausting through stacks CH6028, CH6029 and CH6031, respectively.

Note: The No. 3 Coke Battery Precarbonization facility last operated on September 30, 2005. Pursuant to Significant Source Modification 089-28848-001221 and Significant Permit Modification 089-29236-00121, the No. 3 Coke Battery Precarbonization facility will be permanently shutdown and decommissioned.

(e) One (1) coal crusher: system consisting of three (3) enclosed hammer mills with a maximum capacity of 160 tons per hour, three (3) enclosed hammer mills with a maximum capacity of 150 tons per hour, and two (2) enclosed hammer mills with a maximum capacity of 100 tons per hour, with fugitive emissions contained within the coal blending building.

(f) One (1) enclosed petroleum coke crusher with a maximum capacity of 400 tons per hour which also operates as a coal breaker with a maximum capacity of 1200 tons per hour. This unit is a totally enclosed hammer mill with fugitive emissions contained within the coal blending building.

(g) Coal Handling Storage Facilities, identified as CHSQ0003.

(h) One (1) frozen coal breaker, installed in 1959, with a maximum capacity pf 1300 tons per hour, with fugitive emissions contained within the coal blending building.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38] [326 IAC 11-3-2(a)]

Pursuant to 326 IAC 6.8-2-38 and 326 IAC 11-3-2(a), the PM_{10} from the No. 2 Coke Battery Precarbonization Lines A, B, and C, ESP stacks CH6034, CH6035 and CH6037 and No. 3 Coke

Battery Precarbonization Lines A, B, and C ESP stacks CH6028, CH6029 and CH6031 shall comply with the following:

(a) The PM_{10} emissions from the Coke Battery # 2 Precarbonization Lines A, B, and C electrostatic precipitator stacks CH6034, CH6035 and CH6037 shall not exceed a total of 62.5 pounds per hour.

(b) The PM_{10} emissions from the Coke Battery # 3 Precarbonization Lines A, B, and C electrostatic precipitator stacks CH6028, CH6029 and CH6031 shall not exceed a total of 62.5 pounds per hour.

(c) Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emissions limitations apply to one (1) stack serving the multiple units specified when the facility description notes stack serving, and to each stack of multiple stacks serving multiple facilities when the facility description notes each stack serving.

D.1.2 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3]

(a) Pursuant to 326 IAC 6-4-2:

(1) The coal car bottom thaw shed CHY00071, coal car side thaw station CHT00001 and pet coke crusher used as a second coal crusher generating fugitive dust shall be in violation of this rule (326 IAC 6-4) if any of the following criteria are violated:

(A) A source or combination of sources which cause to exist fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations as determined by the following formula:

$$P = \frac{100\ (R) - U)}{U}$$

Where
P = Percentage increase
R = Number of particles of fugitive dust measured at downward receptor site
U = Number of particles of fugitive dust measured at upwind or background site

(B) The fugitive dust is comprised of fifty percent (50%) or more respirable dust, then the percent increase of dust concentration in subdivision (1) of this section shall be modified as follows:

$$PR = (1.5 \pm N)\ P$$

Where
N = Fraction of fugitive dust that is respirable dust;
PR = allowable percentage increase in dust concentration above background; and
P = no value greater than sixty-seven percent (67%).

(C) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.

(D) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in

subdivisions (1), (2) or (3) of this section. 326 IAC 6-4-2(4) is not federally enforceable.

(2) Pursuant to 326 IAC 6-4-6(6) (Exceptions), fugitive dust from a source caused by adverse meteorological conditions will be considered an exception to this rule (326 IAC 6-4) and therefore not in violation.

(b) Pursuant to 326 IAC 6.8-10-3 Lake County Fugitive Particulate Matter Emissions Limitations, fugitive emissions from coal car bottom thaw shed CHY00071, coal car side thaw station CHT00001 and pet coke crusher used as a second coal crusher generating fugitive dust shall comply with the emission limitations in Section C.5 - Fugitive Dust Emissions.

D.1.3 Coke Oven Batteries Emission Limitations - Precarbonization [326 IAC 6.8-9-3(a)(9)(A)] [326 IAC 11-3-2(a)(1)]

(a) Pursuant to 326 IAC 6.8-9-3(a)(9)(A), Particulate emissions from the precarbonization towers shall be limited by the emission limitations contained in 326 IAC 6.8-2-38.

(b) Pursuant to 326 IAC 11-3-2(a)(1), particulate emissions from precarbonization towers shall be limited by the emission limitations determined under 326 IAC 6.8-2-38.

D.1.4 Opacity Limitations [326 IAC 6.8-9-3(a)(9)(B)]

Pursuant to 326 IAC 6.8-9-3(a)(9)(B), the visible emissions from the precarbonization towers shall comply with the requirements set forth in 326 IAC 5.

D.1.5 Coke Oven Batteries Opacity Limitations [326 IAC 11-3-2(a)(2)]

Pursuant to 326 IAC 11-3-2(a)(2), the visible emissions from any precarbonization unit shall comply with the requirements set forth in 326 IAC 5-1.

D.1.6 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the petroleum coke crusher while in service as a coal breaker, except when otherwise specified in 40 CFR Part 60, Subpart Y.

D.1.7 New Source Performance Standards - Opacity Limitations Coal Preparation Plant [326 IAC 12-1][40 CFR 60 Subpart Y]

Pursuant to 40 CFR 60.250 through 60.254, Minor Source Modification 089-10551-00121, issued February 10, 1999, and A 089-11953-00121, issued April 15, 2000, the opacity from the petroleum coke crusher while in service as a coal breaker shall not exceed twenty percent (20%).

D.1.8 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20(c)(3)]

Pursuant to 326 IAC 7-4.1-20(c)(3), an emission unit shall burn natural gas only:

(a) If it is not listed in this rule; or

(b) under any operating condition not specifically listed in this rule.

D.1.9 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10/NOx/SO2/CO/VOC [326 IAC 2-2]
Nonattainment New Source Review (NSR) Minor Limit PM2.5/SO2 [326 IAC 2-1.1-5]

Pursuant to 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment New Source Review), and in order to render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable to the Carbon Alloy Synthesis Plant (CASP) modifications (Significant Source Modification (SSM) No. 089-28848-00121 and Significant Permit Modification (SPM) No. 089-29236-00121), the Permittee shall decommission and permanently shutdown the No. 3 Coke

Battery Precarbonization facility, consisting of three (3) lines: Line A (CH3A0017), Line B (CH3B0018), and Line C (CH3C0019); prior to startup of the first of the four (4) Carbon Alloy Synthesis Plants (CASP).

Compliance with this requirement, in conjunction with other limits taken as part of the CASP modifications (SSM 089-22848-00121 and SPM 089-29236-00121), will ensure the following:

(a) The PM, PM10, NOx, SO2, VOC, and CO net emissions increase from the CASP modifications (SSM 089-22848-00121 and SPM 089-29236-00121) shall be less than twenty-five (25), fifteen (15), forty (40), forty (40), forty (40), and one hundred (100) tons, respectively, per twelve (12) consecutive month period, with compliance determined at the end of each month. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable to these modifications.

(b) The PM2.5 and SO2 net emissions increase from the CASP modifications (SSM 089-22848-00121 and SPM 089-29236-00121) shall be less than ten (10) and forty (40) tons, respectively, per twelve (12) consecutive month period, with compliance determined at the end of each month. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) are rendered not applicable to these modifications.

D.1.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and any associated control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.11 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) Pursuant to the COMS Waiver, issued by IDEM May 16, 1997, this performance test schedule is the alternative monitoring requirement for the Precarbonization Units, in lieu of installing and operating Continuous Opacity Monitors (COMs) on the six (6) Precarbon ESP stacks CH6034, CH6035, CH6037, CH6028, CH6029 and CH6031, as required by 326 IAC 6.8-5-1.

(b) Pursuant to the protocol, incorporated as Exhibit C of the Agreed Order issued March 22, 1996 the Permittee shall conduct the performance test for Particulate Matter, to demonstrate compliance by measuring combined filterable and condensable emissions utilizing Method 5 and Method 202 of 40 CFR 60 Appendix A or other methods as approved by the Commissioner.

(c) Pursuant to Revised Source Testing Protocol for Nos. 2 and 3 Precarbonization Lines for Coke Batteries No. 2 and 3, respectively, in a letter dated June 29, 1998 the Permittee shall conduct the operation of a single Precarbonization Line through two ESPs. In order for the testing to represent the worst case emissions, the Permittee shall operate a single precarbon line through its associated ESP line with the tie lines between ESPs closed during the test. The results of this testing will be considered in compliance if the average PM_{10} (filterable plus condensible) are less than 31.25 pounds per hour.

This test protocol modification reflects the change in operations of ESPs immediately after the precarbonization line returns from the “stand by” mode which results in decreased ESP collection efficiency.

(d) Pursuant to the COMS Waiver, dated May 16, 1997, the Permittee shall conduct performance tests on the Nos. 2 and 3 Precarbonization Lines for Coke Batteries No. 2 and 3, in accordance with (b) and (c) above for PM_{10} emissions using the schedule and testing frequency established in the COMS Waiver

(e) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.1.12 Particulate Matter Control

(a) The No. 2 Coke Battery Precarbonization ESPs CH3029, CH3030 and CH3031, shall be in operation for PM_{10} control at all times the No. 2 Coke Battery Precarbonization lines A, B and/or C are in operation.

(b) The No. 3 Coke Battery Precarbonization ESPs CH3026, CH3027 and CH3028 shall be in operation for PM_{10} control at all times the No. 3 Coke Battery Precarbonization lines A, B and/or C are in operation.

Compliance Monitoring Requirements

D.1.13 Nos. 2 and 3 Precarbonization [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

(a) The ability of the ESPs CH3029, CH3030, and CH3031 to control particulate emissions shall be monitored, in accordance with the Compliance Monitoring Plan required under the COMS Waiver issued by IDEM May 16, 1997.

(b) The ability of the ESPs, CH3026, CH3027 and CH3028 to control particulate emissions shall be monitored in accordance with the Compliance Monitoring Plan required under the COMS Waiver issued by IDEM May 16, 1997.

(c) The Permittee shall take corrective actions in accordance with the COMS Waiver Compliance Monitoring Plan or reasonable response steps whenever the parameters fall outside the normal operating range as set forth in the Compliance Monitoring Plan. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regards to the reasonable response steps required by this condition. An out of range parameter is not a deviation from this permit. Failure to take corrective action or response steps shall be considered a deviation of this permit.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.14 Record Keeping Requirements

(a) To document the compliance status with Condition D.1.11, the Permittee shall maintain records of the stack tests conducted in accordance with COMS Waiver for Nos. 2 and 3 Precarbonization Lines for Coke Batteries No. 2 and 3.

(b) To document the compliance status with the Condition D.1.13, the Permittee shall maintain records of the parametric monitoring required under the COMS Waiver Compliance Monitoring Plan for the Nos. 2 and 3 Precarbons.

(c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regards to the records required by this condition.

D.1.15 Reporting Requirements

Pursuant to the COMS Waiver issued by IDEM May 16, 1997, the Permittee shall submit quarterly reports on relative parameters which are indicative of process and control device operation for the life of the Nos. 2 and 3 Coke Battery Precarbonization facilities . Section C - General Reporting contains the Permittee’s obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.2 OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: The Coke Battery Operations

(a) No. 2 Coke Battery

(1) One (1) six (6) meter tall vertical flue coke battery with 57 ovens, No. 2 Coke Battery, identified as CP2B0079, constructed in November 1975, with a maximum charging capacity of 217 tons per hour. Excessive coke oven gas back pressure is controlled by three (3) flares lit with internal flare igniters CP3060, CP3061 and CP3062, exhausting to Bypass/Bleeder Flare Stacks CP6105, CP6106 and CP6107.

(2) The No. 2 Coke Battery underfiring system has a maximum combustion heat input capacity of 250 MMBtu per hour, exhausting to stack CP6040 equipped with a continuous opacity monitor (COM).

(3) The No. 2 Coke Battery has a maximum pushing capacity of 161 tons of coke per hour, with particulate emissions controlled by a Mobile Scrubber Car 9119, 9120, 9121 or 9122, identified as CP3034, exhausting to Stack CP6041.

(4) Nos. 2 and 3 Quench Towers identified as CP1Q0080 and CP2Q0081, constructed in 1975, with a maximum combined capacity of 322 tons of coke per hour, and No. 1 Quench Tower identified as CPQ0087 constructed in 1975 with a capacity of 322 tons of coke per hour, each equipped with a quench water header and baffle system with sprays. Nos. 2 and 3 Quench Towers service Nos. 2 and 3 Coke Batteries. No. 1 Quench Tower services Nos. 2, 3, 5 and 7 Coke Batteries.

(5) The No. 2 Coke Battery fugitive emissions are generated from charging operations, off take piping, door leaks, lid leaks and collector main leaks.

(b) No. 3 Coke Battery

(1) One (1) six (6) meter tall vertical flue coke battery with 57 ovens, No. 3 Coke Battery, identified as CP3B0086, constructed in November 1974, with a maximum charging capacity of 217 tons per hour. Excessive coke oven gas back pressure is controlled by three (3) flares lit with internal flare igniters CP3063, CP3064 and CP3065, exhausting to Bypass/Bleeder Flare stacks CP6108, CP6109 and CP 6110.

(2) The No. 3 Coke Battery underfiring system has a maximum combustion heat input capacity of 250 MMBtu per hour, exhausting to stack CP6045, equipped with a continuous opacity monitor (COM).

(3) The No. 3 Coke Battery has a maximum pushing capacity of 161 tons of coke per hour, with particulate emissions controlled by a Mobile Scrubber Car 9119, 9120, 9121 or 9122, identified as CP3038, exhausting to stack CP6046.

(4) The No. 1 Quench Tower, identified as CP3Q0087, constructed in 1975, with a maximum capacity of 322 tons of coke per hour and Nos. 2 and 3 Quench Towers, identified as CP1Q0080 and CP2Q0081 constructed in 1975 with a maximum capacity of 322 tons of coke per hour, equipped with a quench water header and baffle system with sprays. Nos. 2 and 3 Quench Towers service Nos. 2 and 3 Coke Batteries. No. 1 Quench Tower services Nos. 2, 3, 5 and 7 Coke Batteries.

(5) The No. 3 Coke Battery fugitive emissions are generated from charging operations, offtake piping, door leaks, lid leaks and collector main leaks.

Note: The No. 3 Coke Battery last operated on September 30, 2005. Pursuant to Significant Source Modification 089-28848-001221 and Significant Permit Modification 089-29236-00121, the No. 3 Coke Battery will be permanently shutdown and decommissioned.

(c) No. 5 Coke Battery

(1) One (1) three (3) meter short vertical flue coke oven battery with 77 ovens, No. 5 Coke Battery, identified as CP5B0090, constructed in 1954, with a maximum charging capacity of 84 tons per hour. Excessive coke oven gas back pressure is controlled by two (2) flares lit with internal flare igniters CP3066 and CP3067, exhausting to Bypass/Bleeder Flare stacks CP6111 and CP 6112.

(2) The No. 5 Coke Battery underfiring system has a maximum combustion heat input capacity of 125 MMBtu per hour, exhausting to stack CP6049, equipped with a COM.

(3) The No. 5 and No. 7 Coke Batteries have a combined maximum pushing capacity of 103 tons of coke per hour, with particulate emissions controlled by a common baghouse, identified as CP3041, exhausting to stack CP6050.

(4) Nos. 5 and 6 Quench Towers identified as CP5Q0091 and CP5Q0095, constructed in 1954, with a maximum combined capacity of 103 tons of coke per hour, equipped with a quench water header and baffle system with sprays. These towers service Nos. 5 and 7 Coke Batteries.

(5) The No. 5 Coke Battery fugitive emissions are generated from charging operations, offtake piping, door leaks, lid leaks and collector main leaks.

(d) No. 7 Coke Battery

(1) One (1) three (3) meter short vertical flue coke oven battery, with 77 ovens, No. 7 Coke Battery, identified as CP7B0094, constructed in 1954, with a maximum charging capacity of 84 tons per hour. Excessive coke oven gas back pressure is controlled by two (2) flares lit with internal flare igniters CP3068 and CP3069, exhausting to Bypass/Bleeder Flare stacks CP6113 and CP6114.

(2) The No. 7 Coke Battery underfiring system has a maximum combustion heat input capacity of 125 MMBtu per hour, exhausting to stack CP6053 equipped with a COM.

(3) The No. 5 and No. 7 Coke Batteries have a combined maximum pushing capacity of 103 tons of coke per hour, with particulate emissions controlled by a common baghouse, identified as CP3041, exhausting to stack CP6050.

(4) Nos. 5 and 6 Quench Towers identified as CP5Q0091 and CP5Q0095, constructed in 1954, with a maximum combined capacity of 103 tons of coke per hour, equipped with a quench water header and baffle system with sprays. These towers service Nos. 5 and 7 Coke Batteries.

(5) The No. 7 Coke Battery fugitive emissions are generated from charging operations, offtake piping, door leaks, lids leaks and collector main leaks.

(e) Natural Gas Underfiring Injection System Jets
Three (3) natural gas injection jets, identified as CPNGI001, CPNGI002 and CPNGI003, constructed in 2001, with heat input capacities of 22 MMBtu per hour, 43 MMBtu per hour and 122 MMBtu per hour, respectively. Natural gas injection provides Btu stabilization control, coke oven gas quality control and emergency gas supply to the battery underfiring system.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 General Provisions relating to National Emission Standards for Hazardous Air Pollutant (NESHAP) [326 IAC 20-3][40 CFR Part 63, Subpart A] [40 CFR 63 Subpart L] [Table 1of 40 CFR 63 Subpart CCCCC]

(a) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-3, apply to Battery 2, Battery 3, Battery 5 and Battery 7, except when otherwise specified in 40 CFR Part 63, Subpart L.

(b) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1-1, apply to Battery 2, Battery 3, Battery 5 and Battery 7, except when otherwise specified in Table 1 of 40 CFR Part 63, Subpart CCCCC.

D.2.2 National Emission Standards for Hazardous Air Pollutants (NESHAP)- Coke Oven Batteries [326 IAC 20-3] [40 CFR Part 63, Subpart L]

(a) Pursuant to 40 CFR 63.304, the Permittee shall not cause to be discharged or allow to be discharged to the atmosphere coke oven emissions. Each coke oven battery CP2B0079, CP3B0086, CP5B0090 and CP7B0094 shall not exceed the following emission limitations or requirements:

(1) Four and three-tenths percent (4.3%) leaking coke oven doors for each tall 6 meter by product coke oven battery, based on a 30-day rolling average in accordance with 40 CFR 63, Appendix A, Method 303.

(2) Three and eight-tenths percent (3.8%) leaking coke oven doors for each short 3 meter by-product coke oven based on a 30-day rolling average in accordance with 40 CFR 63, Appendix A, Method 303.

(3) Four-tenths percent (0.4%) leaking topside port lids, based on a 30-day rolling average in accordance with 40 CFR 63, Appendix A, Method 303.

(4) Two and five-tenths percent (2.5%) leaking off take systems, based on a 30-day rolling average in accordance with 40 CFR 63, Appendix A, Method 303.

(5) Twelve (12) seconds of visible emissions per charge, based on a 30-day rolling average in accordance with 40 CFR 63, Appendix A, Method 303.

(6) On or after January 1, 2010, unless the US EPA or IDEM, OAQ promulgates more stringent limits pursuant to section 112(i)(8)(C) of Clean Air Act (CAA); the limit for each tall 6-meter by product coke oven battery, shall be four percent (4%) leaking coke oven doors and the limit for each short 3-meter coke oven battery shall be three and three-tenths (3.3%) leaking coke oven doors, based on

a 30-day rolling average in accordance with 40 CFR 63, Appendix A, Method 303.

(b) Pursuant to 40 CFR 63.306, Work Practice Standards, the Permittee shall maintain, a written emission control work practice plan for each coke oven battery. The plan shall be designed to achieve compliance with visible emission limitations for coke oven doors, topside port lids, off take systems, and charging operations under 40 CFR 63 Subpart L.

(1) The work practice plan must address each of the topics specified in paragraph (4) below in sufficient detail and with sufficient specificity to allow the IDEM, OAQ to evaluate the plan for completeness and enforceability.

(2) The IDEM, OAQ may require revisions to the initial plan only where the IDEM, OAQ finds either that the plan does not address each subject area listed in paragraph (4) of D.2.2(b) for each emission point subject to a visible emission standard under 40 CFR 63 Subpart L or that the plan is unenforceable because it contains requirements that are unclear.

(3) During any period of time that a Permittee is required to implement the provisions of a plan for a particular emission point, the failure to implement one or more obligations under the plan and/or any record keeping requirement(s) under 40 CFR 63.311(f)(4) for the emission point during a particular day is a single violation.

(4) Plan components. The Permittee shall organize the work practice plan to indicate clearly which parts of the plan pertain to each emission point subject to visible emission standards under this subpart. Each of the following provisions, at a minimum, shall be addressed in the plan:

(A) An initial and refresher training program for all coke plant operating personnel with responsibilities that impact emissions, including contractors, in job requirements related to emission control and the requirements of this subpart, including work practice requirements. Contractors with responsibilities that impact emission control may be trained by The Permittee or by qualified contractor personnel; however, the Permittee shall ensure that the contractor training program complies with the requirements of this section. The training program in the plan must include:

(i) A list, by job title, of all personnel that are required to be trained and the emission point(s) associated with each job title;

(ii) An outline of the subjects to be covered in the initial and refresher training for each group of personnel;

(iii) A description of the training method(s) that will be used (e.g., lecture, video tape);

(iv) A statement of the duration of initial training and the duration and frequency of refresher training;

(v) A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion of the initial and refresher training; and

(vi) A description of the procedure to be used to document performance of plan requirements pertaining to daily operation of the coke oven battery and its emission control equipment, including a copy of the form to be used, if applicable, as required under the plan provisions implementing paragraph 40 CFR 63.306(b)(7).

(B) Procedures for controlling emissions from coke oven doors on by product coke oven batteries, including:

(i) A program for the inspection, adjustment, repair, and replacement of coke oven doors and jambs, and any other equipment for controlling emissions from coke oven doors, including a defined frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;

(ii) Procedures for identifying leaks that indicate a failure of the emissions control equipment to function properly, including a clearly defined chain of command for communicating information on leaks and procedures for corrective action;

(iii) Procedures for cleaning all sealing surfaces of each door and jamb, including identification of the equipment that will be used and a specified schedule or frequency for the cleaning of sealing surfaces;

(iv) For batteries equipped with self sealing doors, procedures for use of supplemental gasketing and luting materials, if the Permittee elects to use such procedures as part of the program;

(v) For batteries equipped with hand luted doors, procedures for luting and reluting, as necessary to prevent exceedances;

(vi) Procedures for maintaining an adequate inventory of the number of spare coke oven doors and jambs located onsite; and

(vii) Procedures for monitoring and controlling collecting main back pressure, including corrective action if pressure control problems occur.

(C) Procedures for controlling emissions from charging operations on by product coke oven batteries, including:

(i) Procedures for equipment inspection, including the frequency of inspections, and replacement or repair of equipment for controlling emissions from charging, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;

(ii) Procedures for ensuring that the larry car hoppers are filled properly with coal;

(iii) Procedures for the alignment of the larry car over the oven to be charged;

(iv) Procedures for filling the oven (e.g., procedures for staged or sequential charging);

(v) Procedures for ensuring that the coal is leveled properly in the oven; and

(vi) Procedures and schedules for inspection and cleaning of off-take systems (including standpipes, standpipe caps, goosenecks, dampers, and mains), oven roofs, charging holes, topside port lids, the steam supply system, and liquor sprays.

(D) Procedures for controlling emissions from topside port lids on by product coke oven batteries, including:

(i) Procedures for equipment inspection and replacement or repair of topside port lids and port lid mating and sealing surfaces, including the frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances; and

(ii) Procedures for sealing topside port lids after charging, for identifying topside port lids that leak, and procedures for resealing.

(E) Procedures for controlling emissions from off take system(s) on by product coke oven batteries, including:

(i) Procedures for equipment inspection and replacement or repair of off take system components, including the frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;

(ii) Procedures for identifying off take system components that leak and procedures for sealing leaks that are detected; and

(F) Procedures for dampering off ovens prior to a push.

(G) Procedures for maintaining, for each emission point subject to visible emission limitations under this subpart, a daily record of the performance of plan requirements pertaining to the daily operation of the coke oven battery and its emission control equipment, including:

(i) Procedures for recording the performance of such plan requirements; and

(ii) Procedures for certifying the accuracy of such records by the Permittee.

(H) Any additional work practices or requirements specified by the IDEM, OAQ, according to 40 CFR 63.306(d).

(5) Implementation of work practice plans. The Permittee shall implement the provisions of the coke oven emission control work practice plan according to the following requirements:

(A) The Permittee shall Implement the provisions of the work practice plan pertaining to a particular emission point following the second independent exceedance of the visible emission limitation for the emission point in any consecutive 6 month period, by no later than 3 days after receipt of written notification of the second such exceedance from the certified observer. For the purpose of this 40 CFR 63.306(c)(1)(i), the second exceedance is "independent" if either of the following criteria is met:

(i) The second exceedance occurs 30 days or more after the first exceedance;

(ii) In the case of coke oven doors, topside port lids, and off take systems, the 29 run average, calculated by excluding the highest value in the 30 day period, exceeds the value of the applicable emission limitation; or

(iii) In the case of charging emissions, the 29 day logarithmic average, calculated in accordance with Method 303 in appendix A to 40 CFR 63 by excluding the valid daily set of observations in the 30 day period that had the highest arithmetic average, exceeds the value of the applicable emission limitation.

(B) Continue to implement such plan provisions until the visible emission limitation for the emission point is achieved for 90 consecutive days if work practice requirements are implemented pursuant to 40 CFR 63.306(c)(1)(i). After the visible emission limitation for a particular emission point is achieved for 90 consecutive days, any exceedances prior to the beginning of the 90 days are not included in making a determination 40 CFR 63.306(c)(1)(i).

(6) Revisions to the work practice emission control plan will be governed by the following provisions in 40 CFR 63.306(d) and (a)(2).

(A) The IDEM, OAQ may request the Permittee to review and revise as needed the work practice emission control plan for a particular emission point if there are 2 exceedances of the applicable visible emission limitation in the 6 month period that starts 30 days after the Permittee is required to implement work practices under 40 CFR 63.306(c). In the case of a coke oven battery subject to visual emission limitations under this subpart, the second exceedance must be independent under the criteria in 40 CFR 63.306(c)(1)(i).

(B) The IDEM, OAQ may not request the Permittee to review and revise the plan more than twice in any 12 consecutive month period for any particular emission point unless the IDEM, OAQ disapprove the plan according to the provisions of 40 CFR 63.306(d)(6).

(C) If the certified observer calculates that a second exceedance (or, if applicable, a second independent exceedance) has occurred, the certified observer shall notify the Permittee. No later than 10 days after receipt of such a notification, the Permittee shall notify the IDEM, OAQ of any finding of whether work practices are related to the cause or the solution of the problem. This notification is subject to review by the IDEM, OAQ, according to the provisions in 40 CFR 63.306(d)(6).

(D) The Permittee shall submit a revised work practice plan within 60 days of notification from the IDEM, OAQ pursuant to 40 CFR 63.306(d)(1) unless IDEM, OAQ grants an extension of time to submit the revised plan.

(E) If the IDEM, OAQ require a plan revision, the IDEM, OAQ may require the plan to address a subject area or areas in addition to those in 40 CFR 63.306(b), if the IDEM, OAQ determine that without plan coverage of such an additional subject area, there is a reasonable probability of further exceedances of the visible emission limitation for the emission point for which a plan revision is required.

(F) The IDEM, OAQ may disapprove a plan revision required under 40 CFR 63.306(d) if the IDEM, OAQ determine that the revised plan is inadequate to prevent exceedances of the visible emission limitation under 40 CFR 63 Subpart L for the emission point for which a plan revision is required. The IDEM, OAQ may also disapprove the finding that may be submitted pursuant to the 40 CFR 63.303(d)(3) if the IDEM, OAQ determine that a revised plan is needed to prevent exceedances of the applicable visible emission limitations.

(c) Pursuant to 40 CFR 63.307 Standards for Bypass/Bleeder Stacks, the Permittee shall do the following:

(1) Install a bypass/bleeder stack flare system that is capable of controlling 120 percent of the normal gas flow generated by the battery, which shall thereafter be operated and maintained.

(2) Coke oven emissions shall not be vented to the atmosphere through bypass/bleeder stacks, except through the flare system.

(3) Each flare shall be designed for a net heating value of 8.9 MJ/scm (240 Btu/scf) if a flare is steam assisted or air assisted, or a net value of 7.45 MJ/scm (200 Btu/scf) if the flare is non-assisted.

(4) Each flare shall have either a continuously operable pilot flame or an electronic igniter that meets the requirements of D.2.2 (c)(5) and (6) below.

(5) Each electronic igniter shall meet the following requirements:

(A) Each flare shall be equipped with at least two igniter plugs with redundant igniter transformers;

(B) The ignition units shall be designed failsafe with respect to flame detection thermocouples (i.e., any flame detection thermocouples are used only to indicate the presence of a flame, are not interlocked with the ignition unit, and cannot deactivate the ignition system); and

(C) Integral battery backup shall be provided to maintain active ignition operation for a minimum of 15 minutes during a power failure.

(D) Each electronic igniter shall be operated to initiate ignition when the bleeder valve is not fully closed as indicated by an “OPEN” limit switch.

(6) Each flare constructed that does not have an electronic igniter shall be operated with a pilot flame present at all times as determined by 40 CFR 63.309 (h)(2).

(7) Each flare constructed to meet the requirements of 40 CFR 63.307(b) shall be operated with no visible emissions, as determined by the methods specified in 40 CFR 63.309 (h)(1), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(d) Pursuant to 40 CFR 63.308 Standards for collecting mains, the Permittee shall do the following:

(1) Inspect the coke oven battery collecting main for leaks at least once daily in accordance with 40 CFR 63, Appendix A, Method 303.

(2) Record the time and date a leak is first observed, the time and date the leak is temporarily sealed, and the time and date of repair.

(3) Temporarily seal any leak in the collecting main as soon as possible after detection, but no later than 4 hours after detection of the leak.

(4) Initiate a collecting main repair as expeditiously as possible, but no later than 5 calendar days after initial detection of the leak. The repair shall be completed within 15 calendar days after initial detection of the leak unless an alternative schedule is approved by the IDEM, OAQ.

(e) Pursuant to 40 CFR 63.310, (Requirements for startups, shut downs and malfunctions) the Permittee shall do the following:

(1) Operate and maintain the coke oven batteries and their pollution control devices at all times including periods of startup, shut down and malfunction in a manner consistent with good air pollution control practices for minimizing emissions to the levels required by any applicable performance standards under 40 CFR 63, Subpart L. Failure to adhere to these requirements shall not constitute a separate violation, if a violation of an applicable performance or work practice standard has also occurred.

(2) Develop and implement a written startup, shut down and malfunction plan that describes procedures for operating the batteries, including associated control equipment, during a period of a startup, shutdown or malfunction in a manner consistent with good air pollution control practices for minimizing emissions, and procedures for correcting malfunctioning process and control equipment as quickly as practicable.

(3) During a period of startup, shutdown or malfunction the Permittee shall do the following:

(A) Operate the coke batteries and their control devices according to the procedures in the startup, shut down and malfunction plan.

(B) Malfunctions shall be corrected as soon as practicable after their occurrence, in accordance with the Startup Shutdown and Malfunction (SSM) plan.

(C) In order for the provisions of D.2.2(e)(3)(H) to apply with respect to the observation or set of observations for a particular day, notification of a startup, shutdown or malfunction shall be made by the Permittee as follows:

(i) If practicable, to the certified observer, if the observer is at the facility during the occurrence; or

(ii) To the enforcement agency, in writing, within 24 hours of the occurrence first being documented by a company employee, and if the certified observer is not notified, an explanation of why the certified observer was not notified.

(D) The Permittee shall submit a written report to the IDEM within 14 days of a startup, shutdown or malfunction that describes the following:

(i) The time and circumstances of the startup, shutdown or malfunction, and

(ii) Actions taken that might be considered inconsistent with the startup, shutdown or malfunction plan.

(E) Maintain a record of internal reports which form the basis of each malfunction notification.

(F) The Permittee may use the standard operating procedures manual for the batteries, to satisfy the requirements to develop a startup, shutdown or malfunction plan provided the manual meets all the requirements for the SSM plan and is made available for inspection at reasonable times when requested by the IDEM, OAQ.

(G) IDEM may require reasonable revisions of the startup, shutdown or malfunction plan if the plan:

(i) Does not address a startup, shutdown or malfunction event that has occurred;

(ii) Fails to provide for the operation of the source (including associated air pollution control equipment) during a startup, shutdown or malfunction event in a manner consistent with good air pollution control practices for minimizing emissions; or

(iii) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control equipment as quickly as practicable.

(H) If the Permittee demonstrates to the satisfaction of the IDEM, OAQ that a startup, shutdown, or malfunction has occurred, then an observation occurring during such startup, shutdown, or malfunction shall not:

(i) Constitute a violation of relevant requirements of 40 CFR 63, Subpart L.

(ii) Be used in any compliance determination under 40 CFR 63.309; or

(iii) Be considered for purposes of 40 CFR 63.306, until the IDEM, OAQ have resolved the claim that a startup, shutdown, or malfunction has occurred. If the IDEM, OAQ determines that a startup, shutdown, or malfunction has not occurred, such observations may be used for purposes of 40 CFR 63.306, regardless of whether the Permittee further contests such determination. The Permittee's receipt of written notification from the IDEM, OAQ, that a startup, shutdown, or malfunction has not occurred will serve, where applicable under 40 CFR 63.306, as written notification from the certified observer that an exceedance has occurred.

D.2.3 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38] [326 IAC 6.8-9-3(a)(8)] [326 IAC 11-3-2(i)]

Pursuant to 326 IAC 6.8-2-38, 326 IAC 6.8-9-3(a)(8) and 326 IAC 11-3-2(i), the PM_{10} emissions from the Nos. 2, 3, 5 and 7 Coke Battery underfiring stacks and Coke Batteries 5/7 baghouse stack CP6050 shall comply with the following:

(a) The PM_{10} emissions from the Coke Battery number 2 underfiring stack CP6040 shall not exceed 32.30 pounds per hour.

(b) The PM_{10} emissions from the Coke Battery number 3 underfiring stack CP6045 shall not exceed 25.50 pounds per hour.

(c) The PM_{10} emissions from the Coke Battery number 5 underfiring stack CP6049 shall not exceed 24.70 pounds per hour.

(d) The PM_{10} emissions from the Coke Battery number 7 underfiring stack CP6053 shall not exceed 21.30 pounds per hour.

(e) The PM_{10} emissions from the Coke Battery number 5/7 pushing emissions control baghouse shall not exceed 0.017 pound PM_{10} per ton coke produced and 1.28 pounds per hour.

(f) Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emissions limitations apply to one (1) stack serving the multiple units specified when the facility description notes stack serving, and to each stack of multiple stacks serving multiple facilities when the facility description notes each stack serving.

D.2.4 Lake County PM_{10} Coke Battery Emission Requirements [326 IAC 6.8-9]
The Coke Batteries Nos. 2, 3, 5 and 7 shall comply with the following:

(a) Pursuant to 326 IAC 6.8-9-3(a)(1), no visible emissions shall be permitted from more than ten percent (10%) of the observed coke oven doors on any coke oven battery.

(b) Pursuant to 326 IAC 6.8-9-3(a)(2), the visible emissions from the charging operations shall comply with the following:

(1) No visible emissions shall be permitted from the charging system for more than cumulative total of one hundred twenty-five (125) seconds during five (5) consecutive charging periods.

(2) A “charging system” means the equipment required to add coal to a coke battery including a larry car, charge ports, jumper pipe and off take pipe.

(c) Pursuant to 326 IAC 6.8-9-3(a)(3), the emissions from the pushing operations shall comply with the following:

(1) The opacity of emissions from the coke-side of an oven to be pushed, before the first movement of the coke from the oven to the coke car begins, shall not exceed twenty percent (20%).

(2) The opacity of emissions during the pushing operation shall not exceed twenty percent (20%). The pushing shall be considered to begin with the first movement of coke from the oven into the coke car and to end when the quench car enters the quench tower. The opacity shall be determined using 40 CFR 60, Appendix A, Method 9, except that the readings shall be taken at fifteen (15) second intervals. Six (6) consecutive readings shall be averaged to determine the opacity. The observer shall only use those backgrounds that are above the elevation of the battery surface. If this condition cannot be met for six (6) consecutive readings, then the opacity shall be determined using the lesser number of consecutive readings.

(3) The particulate emissions from the pushing control devices: No. 2 and No. 3 Batteries Mobile scrubber cars Nos. 9119, 9120, 9121, and 9122 and No. 5 and No. 7 Coke Batteries Pushing Process Baghouse Stack CP6050 shall not exceed four-hundredths (0.04) pound per ton of coke pushed.

(d) Pursuant to [326 IAC 6.8-9-3(a)(4), no visible emissions shall be permitted from more than three percent (3%) of the total charge port lids on operating ovens of a coke oven battery.

(e) Pursuant to 326 IAC 6.8-9-3(a)(5), visible emissions from the Off take Piping shall comply with the following:

(1) No visible emissions shall be permitted from more than five percent (5%) of the total off take piping on any coke oven battery.

(2) At no time, shall the visible emissions from any gooseneck cap opening exceed twenty percent (20%).

(3) An exclusion from the twenty percent (20%) gooseneck cap opacity limit shall be allowed for two (2) minutes after a gooseneck cap is opened.

(f) Pursuant to 326 IAC 6.8-9-3(a)(6), emissions from gas collector mains shall comply with the following:

(1) No visible emissions shall be permitted from the gas collector mains.

(2) Caps on the collector main shall be exempt from requirement during maintenance.

(g) Pursuant to 326 IAC 6.8-9-3(a)(7)(A), the quench water as applied to the coke shall not exceed one thousand five hundred (1,500) milligrams per liter of total dissolved solids (TDS).

(h) Pursuant to 326 IAC 6.8-9-3(a)(7)(B), the Permittee shall submit the following information regarding its quenching operation in a CCP required to be submitted by 326 IAC 6.8-8-1:

(1) The source of quench water, for example, Lake Michigan water only, or a mixture of Lake Michigan water, spent quench water, process water and miscellaneous sources of non process water.

(2) The volume of quench water and proportion of each source of water.

(i) Pursuant to 326 IAC 6.8-9-3(a)(7)(C), all coke oven towers shall be equipped with baffles. Baffles shall cover ninety-five percent (95%) or more of the cross-sectional area of the exhaust vent or stack for straight quench towers and must be maintained in operable condition. For offset quench towers numbers 2 and 3 at U.S. Steel, the number and arrangement of baffles in the tower shall be maintained as designed. Compliance with the quench tower baffle requirement shall be determined by comparison of the number and arrangement of baffles with the submitted plans.

D.2.5 Emission Limitations for Coke Oven Batteries [326 IAC 11-3-2]

The Coke Batteries Nos. 2, 3, 5 and 7 shall each comply with the following requirements:

(a) Pursuant to 326 IAC 11-3-2(b), the visible emissions from the charging system (including any open charge port, off take system, mobile jumper pipe or larry car) shall not be visible for more than a cumulative total of one hundred twenty-five (125) seconds during five (5) consecutive charging periods.

(b) Pursuant to 326 IAC 11-3-2(c), visible emissions shall not be permitted from more than three percent (3%) of the total charge port lids.

(c) Pursuant to 326 IAC 11-3-2(d), no visible emissions shall be permitted from more than five percent (5%) of the total off take piping on any coke oven battery.

(d) Pursuant to 326 IAC 11-3-2(e), no visible emissions shall be permitted from gas collector main on any coke oven battery.

(e) Pursuant to 326 IAC 11-3-2(f), visible emissions shall not be permitted from more than ten percent (10%) of the total coke oven doors on any coke oven battery.

(f) Pursuant to 326 IAC 11-3-2(g), the coke oven batteries pushing emissions requirements shall be as follows:

(1) All coke oven batteries shall be equipped with a device capable of capturing and collecting coke-side particulate matter such that the effluent gas emissions contain no more than four-hundredths (0.04) gram per two (2.0) kilogram of coke pushed.

(2) Such devices shall be designed and operated in compliance with an operating permit to collect ninety percent (90%) of the pushing emissions. If the construction and design of the device have been approved by the commissioner by granting the permit, the device, if operated properly in compliance with the permit conditions, will be assumed to be collecting ninety percent (90%) of the pushing emissions.

(g) Pursuant to 326 IAC 11-3-2(h)(1), the Nos. 1, 2, 3, 5 and 6 quench towers shall not have visible emissions from the quenching of coke with the direct application of water to hot coke unless quenching is conducted under a tower equipped with efficient baffles to impede the release of particulate into the atmosphere. Efficient baffles are baffles taking the form of slats, louvers, screens, or other impediments placed in a configuration within

a quench tower to force a change of direction and reduction of velocity of the steam plume to aid in the reduction of particulate matter emitted.

(h) Pursuant to 326 IAC 11-3-2(h)(2), the quench water makeup shall not contain a total dissolved solids content of more than one thousand five hundred (1,500) milligrams per liter.

(i) Pursuant to 326 IAC 11-3-2(i), the visible emissions and particulate emissions from the underfire stacks shall comply with the requirements of Conditions C.1 and D.2.4 of this permit.

D.2.6 Coke Oven Identification [326 IAC 11-3-3]

Pursuant to 326 IAC 11-3-3, the Permittee shall maintain the identity of each coke oven in such a manner that it is easily and readily visible from the topside and on each coke and push-side on every coke oven battery.

D.2.7 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20] [326 IAC 11-3-2(i)]

Pursuant to 326 IAC 7-4.1-20(a)(1)(D), the SO_2 emissions from the Coke Battery underfiring stacks CP6040, CP6045, CP6049 and CP6043 for Nos. 2, 3, 5 and 7 coke batteries shall not exceed the following:

(a) Pursuant to 326 IAC 7-4.1-20(a)(1)(D), during periods when the coke oven gas desulfurization unit is not operating:

Emission Unit	Emission Limit lb/MMBtu	Emission Limit Lb/hr
No. 2 and 3 Coke Oven Battery Underfiring stacks	1.270 lbs/MMBtu each	251.5 lbs/hr each
No. 5 and 7 Coke Oven Battery Underfiring stacks	1.270 lbs/MMBtu each	158.75 lbs/hr each

(b) Pursuant to 326 IAC 7-4.1-20(b)(4), during periods when the coke oven gas desulfurization unit is operating:

Emission Unit	Emission Limit lb/MMBtu	Emission Limit Lb/hr
No. 2 and 3 Coke Oven Battery Underfiring stacks	0.260 lbs/MMBtu each	51.5 lbs/hr each
No. 5 Coke Oven Battery Underfiring stacks	0.270 lbs/MMBtu each	22.8 lbs/hr each
No. 7 Coke Oven Battery Underfiring stacks	0.260 lbs/MMBtu each	32.5 lbs/hr each

D.2.8 Nitrogen Oxide (NO_X) Limitations PSD [326 IAC 2-2] and Emissions Offsets [326 IAC 2-3]

Pursuant to the Significant Source Modification 089-12880-00121, issued July 26, 2001, the Natural gas usage injected through the coke oven battery natural gas injection jets CPNGI001, CPNGI002 and CPNGI003 shall not exceed 178.7 million cubic feet (MMCF) per 12-consecutive month period, with compliance demonstrated at the end of each month. Compliance with this limit makes 326 IAC 2-2 PSD and 326 IAC 2-3 not applicable for the modification.

D.2.9 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10/NOx/SO2/CO/VOC [326 IAC 2-2]
Nonattainment New Source Review (NSR) Minor Limit PM2.5/SO2 [326 IAC 2-1.1-5]

Pursuant to 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment New Source Review), and in order to render the requirements of 326 IAC 2-2 (PSD and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable to the Carbon Alloy Synthesis Plant (CASP) modifications (Significant Source Modification (SSM) No. 089-28848-00121 and Significant Permit Modification (SPM) No. 089-29236-00121), the following shall apply:

(a) Prior to startup of the first of the four (4) Carbon Alloy Synthesis Plants (CASP), the Permittee shall decommission and permanently shutdown No. 3 Coke Battery.

(b) Within one hundred eighty (180) days after startup of the third Carbon Alloy Synthesis Plant (CASP), the Permittee shall decommission and permanently shutdown either No. 5 Coke Battery or No. 7 Coke Battery.

(c) Within one hundred eighty (180) days after startup of the fourth Carbon Alloy Synthesis Plant (CASP), the Permittee shall decommission and permanently shutdown either No. 5 Coke Battery or No. 7 Coke Battery, whichever is still operational, and Nos. 5 and 6 Quench Towers.

Compliance with this requirement, in conjunction with other limits taken as part of the CASP modifications (SSM 089-22848-00121 and SPM 089-29236-00121), will ensure the following:

(d) The PM, PM10, NOx, SO2, VOC, and CO net emissions increase from the CASP modifications (SSM 089-22848-00121 and SPM 089-29236-00121) shall be less than twenty-five (25), fifteen (15), forty (40), forty (40), forty (40), and one hundred (100) tons, respectively, per twelve (12) consecutive month period, with compliance determined at the end of each month. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable to these modifications.

(e) The PM2.5 and SO2 net emissions increase from the CASP modifications (SSM 089-22848-00121 and SPM 089-29236-00121) shall be less than ten (10) and forty (40) tons, respectively, per twelve (12) consecutive month period, with compliance determined at the end of each month. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) are rendered not applicable to these modifications.

D.2.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and any associated control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.2.11 National Emission Standards for Hazardous Air Pollutants from Coke Oven Batteries - Visible Emissions Inspection Requirements [40 CFR 63.309][326 IAC 20]

(a) Pursuant to 40 CFR Part 63.309, except as otherwise provided, the Permittee shall conduct a performance test each day, 7 days per week, for each coke oven battery. The test results shall be used in accordance with procedures specified in 40 CFR Part 63 Subpart L to determine compliance with each of the applicable visible emission limitations in Condition D.2.3. If a facility pushes and charges only at night, then the facility must at its option, change their schedule and charge during daylight hours or provide adequate lighting so that visible emission inspections can be made at night. "Adequate lighting" will be determined by the enforcement agency.

(1) Each performance test is to be conducted according to the procedures and requirements 40 CFR 63.309 and in 40 CFR 63, Appendix A, Method 303, or 40 CFR Part 60, Appendix A, Methods 9 and 22 (where applicable).

(2) Each performance test is to be conducted by a certified observer.

(3) The certified observer shall complete any reasonable safety training program offered by the Permittee prior to conducting any performance test at a coke oven battery.

(4) Except as otherwise provided in paragraph (a)(5) of 40 CFR 63.309, the Permittee shall pay an inspection fee to the enforcement agency each calendar quarter to defray the costs of the daily performance tests required under paragraph (a) of 40 CFR 63.309.

(A) The inspection fee shall be determined according to the following formula:

F = H x S where

F = Fees to be paid by owner or operator.
H = Total person hours for inspections: 4 hours for 1 coke oven battery, 6.25 hours for 2 coke oven batteries, 8.25 hours for 3 coke oven batteries. For more than 3 coke oven batteries, use these hours to calculate the appropriate estimate of person hours.
S = Current average hourly rate for private visible emission inspectors in the relevant market.

(B) The Permittee shall not be required to pay an inspection fee (or any part thereof) under paragraph (a)(4) of 40 CFR 63.309, for any monitoring or inspection services required by paragraph (a) of 40 CFR 63.309 that the Permittee can demonstrate are covered by other fees collected by the enforcement agency.

(C) Upon request, the enforcement agency shall provide the Permittee information concerning the inspection services covered by any other fees collected by the enforcement agency, and any information relied upon under paragraph (a)(4)(B) of 40 CFR 63.309.

(5) The EPA shall be the enforcement agency during any period of time that a delegation of enforcement authority is not in effect or a withdrawal of enforcement authority under 40 CFR 63.313 is in effect, and the Administrator is responsible for performing the inspections required by this section, pursuant to 40 CFR 63.313(b).

(b) Within thirty (30) days of receiving notification from the Administrator that the EPA is the enforcement agency for a coke oven battery, the Permittee shall enter into a contract providing for the inspections and performance tests required under this section to be performed by a Method 303 certified observer. The inspections and performance tests will be conducted at the expense of the Permittee, during the period that the EPA is the implementing agency.

(c) The enforcement agency shall commence daily performance tests on the applicable date specified in 40 CFR 63.300 (a) or (c).

(d) The certified observer shall conduct each performance test according to the requirements in this paragraph:

(1) The certified observer shall conduct one run each day to observe and record visible emissions from each coke oven door, topside port lid, and off take system on each coke oven battery. The certified observer also shall conduct five runs to observe and record the seconds of visible emissions per charge for five consecutive charges from each coke oven battery. The observer may perform additional runs as needed to obtain and record a visible emissions value (or set of values) for an emission point that is valid under Method 303 in appendix A 40 CFR Part 63. Observations from fewer than five consecutive charges shall constitute a valid set of charging observations only in accordance with the procedures and conditions specified in sections 3.8 and 3.9 of Method 303 in appendix A 40 CFR Part 63.

(2) If a valid visible emissions value (or set of values) is not obtained for a performance test, there is no compliance determination for that day. Compliance determinations will resume on the next day that a valid visible emissions value (or set of values) is obtained.

(3) After each performance test for a by-product coke oven battery, the certified observer shall check and record the collecting main pressure according to the procedures in section 6.3 of Method 303 in appendix A to 40 CFR Part 63.

(A) The Permittee shall demonstrate pursuant to Method 303 in appendix A to 40 CFR 63 the accuracy of the pressure measurement device upon request of the certified observer;

(B) The Permittee shall not adjust the pressure to a level below the range of normal operation during or prior to the inspection.

(4) In no case shall the Permittee knowingly block a coke oven door, or any portion of a door for the purpose of concealing emissions or preventing observations by the certified observer.

(e) Using the observations obtained from each performance test, the enforcement agency shall compute and record, in accordance with the procedures and requirements of Method 303 in appendix A to 40 CFR Part 63, for each day of operations on which a valid emissions value (or set of values) is obtained:

(1) The 30-run rolling average of the percent leaking coke oven doors, topside port lids, and off take systems on each coke oven battery, using the equations in sections 4.5.3.2, 5.6.5.2, and 5.6.6.2 of Method 303 in appendix A to 40 CFR Part 63;

(2) For by-product coke oven battery charging operations, the logarithmic 30-day rolling average of the seconds of visible emissions per charge for each battery, using the equation in section 3.9 of Method 303 in appendix A to 40 CFR Part 63;

(3) For a by-product coke oven battery subject to the small battery emission limitation for coke oven doors pursuant to 40 CFR 63.304(b)(7), the 30-run rolling average of the number of leaking coke oven doors;

(f) The certified observer shall make available to the implementing agency as well as to The Permittee, a copy of the daily inspection results by the end of the day and shall make available the calculated rolling average for each emission point to The Permittee as soon as practicable following each performance test. The information provided by the certified observer is not a compliance determination. For the purpose of notifying an owner or operator of the results obtained by a certified observer, the person does not have to be certified.

(g) Compliance shall not be determined more often than the schedule provided for performance tests under this section. If additional valid emissions observations are obtained (or in the case of charging, valid sets of emission observations), the arithmetic average of all valid values (or valid sets of values) obtained during the day shall be used in any computations performed to determine compliance under 40 CFR 63.309(d) or determinations under 40 CFR 63.306.

(h) For a flare constructed to meet the requirements of 40 CFR 63.307(b):

(1) Compliance with the provisions in 40 CFR 63.307(c) (visible emissions from flares) shall be determined using Method 22 in appendix A to 40 CFR Part 60, with an observation period of 2 hours; and

(2) Compliance with the provisions in 40 CFR 63.307(b)(4) (flare pilot light) shall be determined using a thermocouple or any other equivalent device.

(i) No observations obtained during any program for training or for certifying observers under this subpart shall be used to determine compliance with the requirements of this subpart or any other federally enforceable standard.

D.2.12 Visible Emission Inspections for Charging [326 IAC 11-3-4(a)]

(a) Pursuant to 326 IAC 11-3-4(a) and in order to demonstrate compliance with Conditions D.2.5(a) and D.2.4(b), the observations shall be made and the identity recorded from any point or points on the topside of a coke oven battery such that the observer can obtain an unobstructed view of the charging operation. The observer shall keep cumulative time of the total number of seconds charging emissions are visible. Time is started when a visible emission appears and is stopped when the visible emission expires. This procedure shall continue throughout the entire charging period. Visible emissions occurring simultaneously from two (2) or more separate points shall be timed as one (1).

(b) Visible emissions shall not be timed from:

(1) Burning coal spilled on the top of the oven or oven lids during charging.

(2) Any equipment other than the charging system or charge ports.

(3) Standpipes during charging.

(4) Charge port lids and the standpipe on the oven most recently charged.

(5) Coke oven doors which may be wind-blown across the topside of a coke oven battery.

(6) Steam from uncombined water.

(c) The time retained is the total time visible emissions are observed during a charge and shall be recorded on a data sheet. If the observations of a consecutive set of five (5) charges are interrupted by an event not in the control of the observer, for example momentary interference by a passing quench car plume, then the data for the interrupted charge(s) shall be discarded and additional consecutive charges shall be observed. Five (5) charges observed as such shall be treated as consecutive charges.

(d) The observer shall discard the data for the charge observed, during each set, which contains the greatest cumulative total number of seconds during which emissions are visible. A set shall consist of the total number of consecutive charges read by the

observer during any one (1) observation period, but in no event shall a set exceed twenty (20) consecutive charges.

D.2.13 Charge Port Lids and Off take Piping - Emissions Testing [326 IAC 11-3-4(b)]

Pursuant to 326 IAC 11-3-4(b) and in order to determine compliance with conditions D.2.5(b) and (c) and D.2.4(d) and (e), the observer shall walk the length of the topside of a coke oven battery, on a line down the middle of the battery, or as close as safety permits, to record the identity of standpipes in a single traverse and charge port lids in a single traverse that have any visible emissions.

(a) Visible emissions shall not be counted from:

(1) Burning coal spilled on the top of the oven or oven lids.

(2) Charge port lids and standpipe lids, from a maximum of three (3) ovens that are opened during a decarbonization period or charging period.

(3) The standpipe on an oven being charged.

(4) Resulting from maintenance work.

(5) Steam caused by the vaporization of wet luting material.

(6) Steam from uncombined water.

(b) Visible emissions from charge port lids shall include all emissions from the charge port casting/lid interface.

(c) Visible emissions from the off take piping assembly shall include any leaks from the following:

(1) Cracks and/or defects in the piping itself.

(2) Flanged joints of any pipes, including the final joint with the collector main.

(3) The standpipe base.

(4) The standpipe lid or along its seal with the standpipe.

(5) Off take piping assembly which is not contained in one (1) of the categories in this subdivision.

D.2.14 Visible Emissions for Oven Doors [326 IAC 11-3-4(c)]

(a) Pursuant to 326 IAC 11-3-4(c) and in order to demonstrate compliance with Conditions D.2.5(e) and D.2.4(a), an observer shall record the starting time of the inspection, then shall move steadily along the push-side or coke-side of a coke oven battery, stopping only to record the identity of any doors of ovens not temporarily or permanently taken out of service that have visible emissions, but not including visible emissions due to steam from uncombined water. The inspector shall have any of the following options:

(1) To wait for any doors which are blocked from the inspector's view to becomes unobstructed.

(2) To continue the inspection and return when the view of the doors becomes unobstructed.

(3) To exclude the obstructed doors from the calculation of the total number of doors observed.

(b) The finishing time of that inspection shall be recorded followed by the inspector repeating the same procedure on the opposite side of the same battery. The inspector shall be positioned either outside of the quench car tracks on the coke-side of the battery or outside of the push-side bench. After a brief scan of a coke oven door, the observer shall proceed in the inspection checking each succeeding door in a like manner.

D.2.15 Visible Emissions Inspections for Gas Collector Main [326 IAC 11-3-4(e)]

Pursuant to 326 IAC 11-3-4(e) and in order to determine compliance with conditions D.2.5(d) and D.2.4(f), the observer shall walk the length of the topside of the gas collector main, to record the number of points in a single traverse from which emissions are visible.

D.2.16 Visible Emissions Inspections Pushing [326 IAC 6.8-9-3(a)(3)]

(a) Pursuant to 326 IAC 6.8-9-3(a)(3)(A) and in order to determine compliance with Condition D.2.4(c)(1), the opacity of emissions from the coke-side of an oven to be pushed, before the first movement of the coke from the oven to the coke car begins shall be determined on an instantaneous basis at the top of the battery. The observer shall be positioned outside of the quench car rails.

(b) Pursuant to 326 IAC 6.8-9-3(a)(3)(B) and in order to determine compliance with Condition D.2.4(c)(2), the opacity of emissions from the pushing operations (begin with the first movement of coke from the oven into the coke car and to end when the quench car enters the quench tower), shall be determined using 40 CFR 60, Appendix A, Method 9, except the readings shall be taken at fifteen (15) second intervals. Six (6) consecutive readings shall be averaged to determine the opacity. The observer shall only use those backgrounds that are above the elevation of the battery surface. If this condition cannot be met for six (6) consecutive readings, then the opacity shall be determined using the lesser number of consecutive readings.

D.2.17 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) Not later than thirty (30) months after issuance of this permit (Permit No. T089-7663-00121) or two and one half (2 ½) years from the date of the most recent valid compliance demonstration, which ever is earlier, in order to demonstrate compliance with Condition D.2.3, the Permittee shall perform PM_{10} testing on the No. 5 and 7 Coke Batteries Pushing Baghouse Stack CP6050, using the appropriate methods to measure PM_{10} as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every two and one half (2 ½) years from the date of the most recent valid compliance demonstration.

(b) Not later than thirty (30) months after issuance of this permit (Permit No. T089-7663-00121) or five (5) years from the date of the most recent valid compliance demonstration, which ever is earlier, in order to demonstrate compliance with Condition D.2.3, the Permittee shall perform PM_{10} testing on the No. 2, No. 3, No. 5 and No. 7 coke batteries underfire Stacks CP6040, CP6045, CP6049 and CP6053, using the appropriate methods to measure PM_{10} as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

(c) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation wtih regard to the performance testing required by this condition.

D.2.18 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2)]

To demonstrate compliance with condition D.2.7, the Permittee shall perform Sulfur Fuel Sampling and Analysis. Section C - Sulfur Fuel Sampling and Analysis contains the Permittee's obligation with regard to the sampling and analysis required by this condition.

D.2.19 Particulate Matter Control [326 IAC 2-7-6(6)]

(a) Except as otherwise provided by statute, rule, or this permit, PM control shall be as follows:

(1) The mobile scrubber cars 9119, 9120, 9121 and/or 9122 shall be in operation at all times, when the No. 2 and/or 3 Coke Batteries pushing processes are in operation to control particulate matter.

(2) The baghouse CP3041 shall be in operation at all times, when the No. 5 and/or 7 Coke Batteries pushing processes are in operation, to control particulate matter.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

D.2.20 Visible Emissions Notations

(a) Visible emission notations of the No. 2 and No. 3 Coke Oven Battery: mobile scrubber cars 9119, 9120, 9121 and 9122 and the No. 5 and No. 7 Coke Oven Battery: pushing bag house stack CP6050 shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation of this permit.

(f) The Permittee shall comply with the most current Continuous Compliance Plan visible emission evaluation program. Section C - Continuous Compliance Plan contains the Permittee’s obligation with regards to the visible emission evaluation program required by this condition.

D.2.21 Parametric Monitoring

(a) The Permittee shall record the pressure drop across the baghouse CP3041 used in conjunction with No. 5 and No. 7 coke oven batteries pushing operations at least once per day when pushing is occurring. When for any one reading, the pressure drop across each baghouse is outside the normal range of 3 to 15 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation of this permit.

(b) The Permittee shall comply with the most current Continuous Compliance Plan for the baghouse operation, recording and maintenance. Section C - Continuous Compliance Plan contains the Permittee's obligation with regards to the baghouse operation, recording and maintenance required by this condition.

(c) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.2.22 Continuous Opacity Monitoring (COM) [326 IAC 3-5]

Pursuant to 326 IAC 3-5, the continuous monitoring system shall be calibrated, maintained and operated to measure the opacity of the exhaust from the Nos. 2, 3, 5 and 7 Coke Battery underfiring stacks CP6040, CP6045, CP6049 and CP6053. The continuous opacity monitoring system shall be certified in accordance with and meet the performance specifications of 326 IAC 3-5-2.

D.2.23 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous opacity monitoring systems (COMS) and related equipment.

(b) All COMS shall meet the performance specifications of 40 CFR 60, Appendix B, Performance Specification No. 1, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5.

(c) In the event that a breakdown of a COMS occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.

(d) Whenever a COMS is malfunctioning or is down for maintenance, or repairs for a period of twenty four (24) hours or more, and a backup COMS is not on line within twenty-four (24) hours of shutdown or malfunction of the primary COMS, the Permittee shall provide a certified opacity reader, who may be an employee of the Permittee or an independent contractor, to self-monitor the emissions from the emission unit stack.

(1) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.

(2) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least twice per day during daylight operations, with at least four (4) hours between each set of readings until a COMS is on line.

(3) Method 9 readings may be discontinued once a COM is online.

(4) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.

(5) If abnormal emissions are observed, the Permittee shall take reasonable response Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Observation of abnormal emissions that do not violate an applicable opacity limit is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(e) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5, (and 40 CFR 63).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.24 National Emission Standards for Hazardous Air Pollutants from Coke Oven Batteries -Record Keeping and Reporting Requirements [40 CFR 63.311][326 IAC 20]

(a) To document compliance with Condition D.2.2, the Permittee shall maintain the following records:

(1) A copy of the work practice plan for each emission point, any revisions and the following:

(A) All audiovisual and written training materials,

(B) Dates of each training class,

(C) Names of participants in each class; and

(D) Documentation that all appropriate personnel have successfully completed the training required in condition D.2.2(b)(4)(A).

(2) Records required to be maintained by the work practice plan provisions implemented under 40 CFR 63.306 (b)(7);

(3) Records resulting from audits of the effectiveness of the work practice plan for the particular emission point;

(4) Records of the inventory of coke oven doors and jambs;

(5) The design drawings and engineering specifications for the bypass/bleeder stack flare system; and

(6) Records specified in 40 CFR Part 63.310(f) regarding the basis of each malfunction.

(b) The Permittee shall include the following information in the semi-annual compliance certification:

(1) Certification, that meets the requirements of 326 IAC 2-7-6(1), signed by a responsible official, that no coke oven gas was vented, except through the bypass/bleeder stack flare system of a by-product coke oven battery during the

reporting period or that venting report has been submitted in accordance with 40 CFR 63.311(e).

(2) Certification, that meets the requirements of 326 IAC 2-7-6(1), signed by a responsible official, that a startup, shutdown, or malfunction event did not occur for a coke oven battery during the reporting period or that a startup, shutdown, or malfunction event did occur and a report was submitted in accordance with 40 CFR 63.310(e).

(3) Certification, that meets the requirements of 326 IAC 2-7-6(1), signed by a responsible official, that work practices were implemented if applicable under 40 CFR 63.306.

D.2.25 Record Keeping Requirements

(a) To document the compliance status with Condition D.2.22, the Permittee shall maintain records of the continuous opacity monitoring (COM) data in accordance with 326 IAC 3-5. Records shall be complete and sufficient to establish compliance with the limits established in this section. When the COM system is not functioning, the Permittee shall maintain records sufficient to demonstrate compliance D.2.23.

(b) To document the compliance status with Condition D.2.7, the Permittee shall maintain records in accordance with Section C - Sulfur Dioxide (SO_2) Record Keeping Requirements (Entire Source).

(c) To document the compliance status with Condition D.2.8, the Permittee shall maintain records of the natural gas usage for 12 month consecutive periods, with compliance demonstrated at the end of each month.

(d) To document the compliance status with Condition D.2.9(b) and D.2.9(c), the Permittee shall maintain a record of the dates the No. 5 Coke Oven Battery, the No. 7 Coke Oven Battery, and the Nos. 5 and 6 Quench Towers are each permanently shutdown.

(e) To document the compliance status with Condition D.2.20, the Permittee shall maintain records of the once per day visible emissions notations of the stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(f) To document the compliance status with Condition D.2.21, the Permittee shall maintain records of the once per day pressure drop during normal operation. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g. the process did not operate that day).

(g) Section C - General Record Keeping Requirements contains the Permittee's obligations with regards to the records required by this condition.

D.2.26 Reporting Requirements

(a) A quarterly report of opacity exceedances shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee’s obligation with regard to the reporting required by this condition.

(b) A quarterly summary report to document the compliance status with condition D.2.7 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C – Sulfur Dioxide SO_2 Reporting Requirements (Entire Source) contains the Permittee's obligations with regards to the records required by this condition..

(c) A quarterly summary of the natural gas usage to document the compliance status with Condition D.2.8, shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.

National Emission Standards for Hazardous Air Pollutants (NESHAP) for Coke Ovens: Pushing, Quenching and Battery Stacks 40 CFR 63, Subpart CCCCC]

D.2.27 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Coke Ovens: Pushing, Quenching and Battery Stacks [40 CFR 63, Subpart CCCCC]

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart CCCCC—National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks

Source: 68 FR 18025, Apr. 14, 2003, unless otherwise noted.

What This Subpart Covers

§ 63.7280 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for pushing, soaking, quenching, and battery stacks at coke oven batteries. This subpart also establishes requirements to demonstrate initial and continuous compliance with all applicable emission limitations, work practice standards, and operation and maintenance requirements in this subpart.

§ 63.7281 Am I subject to this subpart?

You are subject to this subpart if you own or operate a coke oven battery at a coke plant that is (or is part of) a major source of hazardous air pollutant (HAP) emissions. A major source of HAP is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

§ 63.7282 What parts of my plant does this subpart cover?

(a) This subpart applies to each new or existing affected source at your coke plant. The affected source is each coke oven battery.

(b) This subpart covers emissions from pushing, soaking, quenching, and battery stacks from each affected source.

(c) An affected source at your coke plant is existing if you commenced construction or reconstruction of the affected source before July 3, 2001.

(d) An affected source at your coke plant is new if you commenced construction or reconstruction of the affected source on or after July 3, 2001. An affected source is reconstructed if it meets the definition of "reconstruction" in §63.2.

§ 63.7283 When do I have to comply with this subpart?

(a) If you have an existing affected source, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you no later than April 14, 2006.

(b) If you have a new affected source and its initial startup date is on or before April 14, 2003, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you by April 14, 2003.

(c) If you have a new affected source and its initial startup date is after April 14, 2003, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you upon initial startup.

(d) You must meet the notification and schedule requirements in §63.7340. Several of these notifications must be submitted before the compliance date for your affected source.

[68 FR 18025, Apr. 14, 2003; 68 FR 19885, Apr. 22, 2003]

Emission Limitations and Work Practice Standards

§ 63.7290 What emission limitations must I meet for capture systems and control devices applied to pushing emissions?

(a) You must not discharge to the atmosphere emissions of particulate matter from a control device applied to pushing emissions from a new or existing coke oven battery that exceed the applicable limit in paragraphs (a)(1) through (4) of this section:

(2) 0.02 pound per ton (lb/ton) of coke if a moveable hood vented to a stationary control device is used to capture emissions;

(3) If a mobile scrubber car that does not capture emissions during travel is used:

(ii) 0.01 lb/ton of coke for a control device applied to pushing emissions from a tall battery; and

(b) You must meet each operating limit in paragraphs (b)(1) through (4) of this section that applies to you for a new or existing coke oven battery.

(1) For each venturi scrubber applied to pushing emissions, you must maintain the daily average pressure drop and scrubber water flow rate at or above the minimum levels established during the initial performance test.

(3) (i) For each capture system that uses an electric motor to drive the fan, you must maintain the daily average fan motor amperes at or above the minimum level established during the initial performance test; and

(ii) For each capture system that does not use a fan driven by an electric motor, you must maintain the daily average static pressure at the inlet to the control device at an equal or greater vacuum than the level established during the initial performance test or maintain the daily average fan revolutions per minute (RPM) at or above the minimum level established during the initial performance test.

[68 FR 18025, Apr. 14, 2003, as amended at 69 FR 60818, Oct. 13, 2004]

§ 63.7291 What work practice standards must I meet for fugitive pushing emissions if I have a by-product coke oven battery with vertical flues?

(a) You must meet each requirement in paragraphs (a)(1) through (7) of this section for each new or existing by-product coke oven battery with vertical flues.

(1) Observe and record the opacity of fugitive pushing emissions from each oven at least once every 90 days. If an oven cannot be observed during a 90-day period due to circumstances that were not reasonably avoidable, you must observe the opacity of the first push of that oven following the close of the 90-day period that is capable of being observed in accordance with the procedures in §63.7334(a), and you must document why the oven was not observed

within a 90-day period. All opacity observations of fugitive pushing emissions for batteries with vertical flues must be made using the procedures in §63.7334(a).

(2) If two or more batteries are served by the same pushing equipment and total no more than 90 ovens, the batteries as a unit can be considered a single battery.

(3) Observe and record the opacity of fugitive pushing emissions for at least four consecutive pushes per battery each day. Exclude any push during which the observer's view is obstructed or obscured by interferences and observe the next available push to complete the set of four pushes. If necessary due to circumstances that were not reasonably avoidable, you may observe fewer than four consecutive pushes in a day; however, you must observe and record as many consecutive pushes as possible and document why four consecutive pushes could not be observed. You may observe and record one or more non-consecutive pushes in addition to any consecutive pushes observed in a day.

(4) Do not alter the pushing schedule to change the sequence of consecutive pushes to be observed on any day. Keep records indicating the legitimate operational reason for any change in your pushing schedule which results in a change in the sequence of consecutive pushes observed on any day.

(5) If the average opacity for any individual push exceeds 30 percent opacity for any short battery or 35 percent opacity for any tall battery, you must take corrective action and/or increase coking time for that oven. You must complete corrective action or increase coking time within either 10 calendar days or the number of days determined using Equation 1 of this section, whichever is greater:

$X = 0.55 * Y$ (Eq. 1)

Where:

X = Number of calendar days allowed to complete corrective action or increase coking time; and

Y = Current coking time for the oven, hours.

For the purpose of determining the number of calendar days allowed under Equation 1 of this section, day one is the first day following the day you observed an opacity in excess of 30 percent for any short battery or 35 percent for any tall battery. Any fraction produced by Equation 1 of this section must be counted as a whole day. Days during which the oven is removed from service are not included in the number of days allowed to complete corrective action.

(6)(i) You must demonstrate that the corrective action and/or increased coking time was successful. After a period of time no longer than the number of days allowed in paragraph (a)(5) of this section, observe and record the opacity of the first two pushes for the oven capable of being observed using the procedures in §63.7334(a). The corrective action and/or increased coking time was successful if the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery. If the corrective action and/or increased coking time was successful, you may return the oven to the 90-day reading rotation described in paragraph (a)(1) of this section. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the corrective action and/or increased coking time was unsuccessful, and you must complete additional corrective action and/or increase coking time for that oven within the number of days allowed in paragraph (a)(5) of this section.

(ii) After implementing any additional corrective action and/or increased coking time required under paragraph (a)(6)(i) or (a)(7)(ii) of this section, you must demonstrate that corrective action and/or increased coking time was successful. After a period of time no longer than the number of days allowed in paragraph (a)(5) of this section, you must observe and record the opacity of the first two pushes for the oven capable of being observed using the procedures in §63.7334(a). The corrective action and/or increased coking time was successful if the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery. If the corrective action and/or increased coking time was successful, you may return the oven to the 90-day reading rotation described in paragraph (a)(1) of this section. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the corrective action and/or increased coking time was unsuccessful, and you must follow the procedures in paragraph (a)(6)(iii) of this section.

(iii) If the corrective action and/or increased coking time was unsuccessful as described in paragraph (a)(6)(ii) of this section, you must repeat the procedures in paragraph (a)(6)(ii) of this section until the corrective action and/or increased coking time is successful. You must report to the permitting authority as a deviation each unsuccessful attempt at corrective action and/or increased coking time under paragraph (a)(6)(ii) of this section.

(7)(i) If at any time you place an oven on increased coking time as a result of fugitive pushing emissions that exceed 30 percent for a short battery or 35 percent for a tall battery, you must keep the oven on the increased coking time until the oven qualifies for decreased coking time using the procedures in paragraph (a)(7)(ii) or (a)(7)(iii) of this section.

(ii) To qualify for a decreased coking time for an oven placed on increased coking time in accordance with paragraph (a)(5) or (6) of this section, you must operate the oven on the decreased coking time. After no more than two coking cycles on the decreased coking time, you must observe and record the opacity of the first two pushes that are capable of being observed using the procedures in §63.7334(a). If the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery, you may keep the oven on the decreased coking time and return the oven to the 90-day reading rotation described in paragraph (a)(1) of this section. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the attempt to qualify for a decreased coking time was unsuccessful. You must then return the oven to the previously established increased coking time, or implement other corrective action(s) and/or increased coking time. If you implement other corrective action and/or a coking time that is shorter than the previously established increased coking time, you must follow the procedures in paragraph (a)(6)(ii) of this section to confirm that the corrective action(s) and/or increased coking time was successful.

(iii) If the attempt to qualify for decreased coking time was unsuccessful as described in paragraph (a)(7)(ii) of this section, you may again attempt to qualify for decreased coking time for the oven. To do this, you must operate the oven on the decreased coking time. After no more than two coking cycles on the decreased coking time, you must observe and record the opacity of the first two pushes that are capable of being observed using the procedures in §63.7334(a). If the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery, you may keep the oven on the decreased coking time and return the oven to the 90-day reading rotation described in paragraph (a)(1) of this section. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the attempt to qualify for a decreased coking time was unsuccessful. You must then return the oven to the previously established increased coking time, or implement other corrective action(s) and/or increased coking time. If you implement other corrective action and/or a coking time that is shorter than the previously established increased coking time, you must follow the procedures in paragraph (a)(6)(ii) of this section to confirm that the corrective action(s) and/or increased coking time was successful.

(iv) You must report to the permitting authority as a deviation the second and any subsequent consecutive unsuccessful attempts on the same oven to qualify for decreased coking time as described in paragraph (a)(7)(iii) of this section.

(b) As provided in §63.6(g), you may request to use an alternative to the work practice standards in paragraph (a) of this section.

§ 63.7294 What work practice standard must I meet for soaking?

(a) For each new and existing by-product coke oven battery, you must prepare and operate at all times according to a written work practice plan for soaking. Each plan must include measures and procedures to:

(1) Train topside workers to identify soaking emissions that require corrective actions.

(2) Damper the oven off the collecting main prior to opening the standpipe cap.

(3) Determine the cause of soaking emissions that do not ignite automatically, including emissions that result from raw coke oven gas leaking from the collecting main through the damper, and emissions that result from incomplete coking.

(4) If soaking emissions are caused by leaks from the collecting main, take corrective actions to eliminate the soaking emissions. Corrective actions may include, but are not limited to, reseating the damper, cleaning the flushing liquor piping, using aspiration, putting the oven back on the collecting main, or igniting the emissions.

(5) If soaking emissions are not caused by leaks from the collecting main, notify a designated responsible party. The responsible party must determine whether the soaking emissions are due to incomplete coking. If incomplete coking is the cause of the soaking emissions, you must put the oven back on the collecting main until it is completely coked or you must ignite the emissions.

(b) As provided in §63.6(g), you may request to use an alternative to the work practice standard in paragraph (a) of this section.

§ 63.7295 What requirements must I meet for quenching?

(a) You must meet the requirements in paragraphs (a)(1) and (2) of this section for each quench tower and backup quench station at a new or existing coke oven battery.

(1) For the quenching of hot coke, you must meet the requirements in paragraph (a)(1)(i) or (ii) of this section.

(i) The concentration of total dissolved solids (TDS) in the water used for quenching must not exceed 1,100 milligrams per liter (mg/L); or

(ii) The sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in the water used for quenching must not exceed the applicable site-specific limit approved by the permitting authority.

(2) You must use acceptable makeup water, as defined in §63.7352, as makeup water for quenching.

(b) For each quench tower at a new or existing coke oven battery and each backup quench station at a new coke oven battery, you must meet each of the requirements in paragraphs (b)(1) through (4) of this section.

(1) You must equip each quench tower with baffles such that no more than 5 percent of the cross sectional area of the tower may be uncovered or open to the sky.

(2) You must wash the baffles in each quench tower once each day that the tower is used to quench coke, except as specified in paragraphs (b)(2)(i) and (ii) of this section.

(i) You are not required to wash the baffles in a quench tower if the highest measured ambient temperature remains less than 30 degrees Fahrenheit throughout that day (24-hour period). If the measured ambient temperature rises to 30 degrees Fahrenheit or more during the day, you must resume daily washing according to the schedule in your operation and maintenance plan.

(ii) You must continuously record the ambient temperature on days that the baffles were not washed.

(3) You must inspect each quench tower monthly for damaged or missing baffles and blockage.

(4) You must initiate repair or replacement of damaged or missing baffles within 30 days and complete as soon as practicable.

(c) As provided in §63.6(g), you may request to use an alternative to the work practice standards in paragraph (b) of this section.

§ 63.7296 What emission limitations must I meet for battery stacks?

You must not discharge to the atmosphere any emissions from any battery stack at a new or existing by-product coke oven battery that exhibit an opacity greater than the applicable limit in paragraphs (a) and (b) of this section.

(a) Daily average of 15 percent opacity for a battery on a normal coking cycle.

(b) Daily average of 20 percent opacity for a battery on batterywide extended coking.

Operation and Maintenance Requirements

§ 63.7300 What are my operation and maintenance requirements?

(a) As required by §63.6(e)(1)(i), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.

(b) You must prepare and operate at all times according to a written operation and maintenance plan for the general operation and maintenance of new or existing by-product coke oven batteries. Each plan must address, at a minimum, the elements listed in paragraphs (b)(1) through (6) of this section.

(1) Frequency and method of recording underfiring gas parameters.

(2) Frequency and method of recording battery operating temperature, including measurement of individual flue and cross-wall temperatures.

(3) Procedures to prevent pushing an oven before it is fully coked.

(4) Procedures to prevent overcharging and undercharging of ovens, including measurement of coal moisture, coal bulk density, and procedures for determining volume of coal charged.

(5) Frequency and procedures for inspecting flues, burners, and nozzles.

(6) Schedule and procedures for the daily washing of baffles.

(c) You must prepare and operate at all times according to a written operation and maintenance plan for each capture system and control device applied to pushing emissions from a new or existing coke oven battery. Each plan must address at a minimum the elements in paragraphs (c)(1) through (3) of this section.

(1) Monthly inspections of the equipment that are important to the performance of the total capture system (*e.g.,* pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (*e.g.,* presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). In the event a defect or deficiency is found in the capture system (during a monthly inspection or between inspections), you must complete repairs within 30 days after the date that the defect or deficiency is discovered. If you determine that the repairs cannot be completed within 30 days, you must submit a written request for an extension of time to complete the repairs that must be received by the permitting authority not more than 20 days after the date that the defect or deficiency is discovered. The request must contain a description of the defect or deficiency, the steps needed and taken to correct the problem, the interim steps being taken to mitigate the emissions impact of the defect or deficiency, and a proposed schedule for completing the repairs. The request shall be deemed approved unless and until such time as the permitting authority notifies you that it objects to the request. The permitting authority may consider all relevant factors in deciding whether to approve or deny the request (including feasibility and safety). Each approved schedule must provide for completion of repairs as expeditiously as practicable, and the permitting authority may request modifications to the proposed schedule as part of the approval process.

(2) Preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

(3) Corrective action for all baghouses applied to pushing emissions. In the event a bag leak detection system alarm is triggered, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Actions may include, but are not limited to:

(i) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media or otherwise repairing the control device.

(iv) Sealing off a defective baghouse compartment.

(v) Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.

(vi) Shutting down the process producing the particulate emissions.

[68 FR 18025, Apr. 14, 2003, as amended at 70 FR 44289, Aug. 2, 2005]

General Compliance Requirements

§ 63.7310 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in §63.2.

(b) During the period between the compliance date specified for your affected source in §63.7283 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(c) You must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3).

[68 FR 18025, Apr. 14, 2003, as amended at 71 FR 20467, Apr. 20, 2006]

Initial Compliance Requirements

§ 63.7320 By what date must I conduct performance tests or other initial compliance demonstrations?

(a) As required in §63.7(a)(2), you must conduct a performance test to demonstrate compliance with each limit in §63.7290(a) for emissions of particulate matter from a control device applied to pushing emissions that applies to you within 180 calendar days after the compliance date that is specified in §63.7283.

(b) You must conduct performance tests to demonstrate compliance with the TDS limit or constituent limit for quench water in §63.7295(a)(1) and each opacity limit in §63.7297(a) for a by-product coke oven battery stack by the compliance date that is specified in §63.7283.

(c) For each work practice standard and operation and maintenance requirement that applies to you, you must demonstrate initial compliance within 30 calendar days after the compliance date that is specified in §63.7283.

§ 63.7321 When must I conduct subsequent performance tests?

For each control device subject to an emission limit for particulate matter in §63.7290(a), you must conduct subsequent performance tests no less frequently than twice (at mid-term and renewal) during each term of your title V operating permit.

§ 63.7322 What test methods and other procedures must I use to demonstrate initial compliance with the emission limits for particulate matter?

(a) You must conduct each performance test that applies to your affected source according to the requirements in paragraph (b) of this section.

(b) To determine compliance with the emission limit for particulate matter from a control device applied to pushing emissions where a cokeside shed is the capture system, follow the test methods and procedures in paragraphs (b)(1) and (2) of this section. To determine compliance with a process-weighted mass rate of particulate matter (lb/ton of coke) from a control device applied to pushing emissions where a cokeside shed is not used, follow the test methods and procedures in paragraphs (b)(1) through (4) of this section.

(1) Determine the concentration of particulate matter according to the following test methods in appendix A to 40 CFR part 60.

(i) Method 1 to select sampling port locations and the number of traverse points. Sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 5 or 5D, as applicable, to determine the concentration of front half particulate matter in the stack gas.

(2) During each particulate matter test run, sample only during periods of actual pushing when the capture system fan and control device are engaged. Collect a minimum sample volume of 30 dry standard cubic feet of gas during each test run. Three valid test runs are needed to comprise a performance test. Each run must start at the beginning of a push and finish at the end of a push (*i.e.* , sample for an integral number of pushes).

(3) Determine the total combined weight in tons of coke pushed during the duration of each test run according to the procedures in your source test plan for calculating coke yield from the quantity of coal charged to an individual oven.

(4) Compute the process-weighted mass emissions (E_p) for each test run using Equation 1 of this section as follows:

$$E_p = \frac{C \times Q \times T}{P \times K} \qquad \text{(Eq. 1)}$$

Where:

E_p= Process weighted mass emissions of particulate matter, lb/ton;

C = Concentration of particulate matter, gr/dscf;

Q = Volumetric flow rate of stack gas, dscf/hr;

T = Total time during a run that a sample is withdrawn from the stack during pushing, hr;

P = Total amount of coke pushed during the test run, tons; and

K = Conversion factor, 7,000 gr/lb.

[68 FR 18025, Apr. 14, 2003, as amended at 70 FR 44289, Aug. 2, 2005]

§ 63.7323 What procedures must I use to establish operating limits?

(a) For a venturi scrubber applied to pushing emissions from a coke oven battery, you must establish site-specific operating limits for pressure drop and scrubber water flow rate according to the procedures in paragraphs (a)(1) and (2) of this section.

(1) Using the continuous parameter monitoring systems (CPMS) required in §63.7330(b), measure and record the pressure drop and scrubber water flow rate for each particulate matter test run during periods of pushing. A minimum of one pressure drop measurement and one scrubber water flow rate measurement must be obtained for each push.

(2) Compute and record the average pressure drop and scrubber water flow rate for each test run. Your operating limits are the lowest average pressure drop and scrubber water flow rate values recorded during any of the three runs that meet the applicable emission limit.

(c) For a capture system applied to pushing emissions from a coke oven battery, you must establish a site-specific operating limit according to the procedures in paragraphs (c)(1), (2), or (3) of this section.

(2) If you elect the operating limit in §63.7290(b)(3)(i) for fan motor amperes, measure and record the fan motor amperes during each push sampled for each particulate matter test run. Your operating limit is the lowest fan motor amperes recorded during any of the three runs that meet the emission limit.

(3) If you elect the operating limit in §63.7290(b)(3)(ii) for static pressure or fan RPM, measure and record the static pressure at the inlet of the control device or fan RPM during each push sampled for each particulate matter test run. Your operating limit for static pressure is the minimum vacuum recorded during any of the three runs that meets the emission limit. Your operating limit for fan RPM is the lowest fan RPM recorded during any of the three runs that meets the emission limit.

(e) You may change the operating limit for a venturi scrubber, capture system, or mobile control device that captures emissions during pushing if you meet the requirements in paragraphs (e)(1) through (3) of this section.

(1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate that emissions of particulate matter from the control device do not exceed the applicable limit in §63.7290(a).

(3) Establish revised operating limits according to the applicable procedures in paragraphs (a) through (d) of this section.

[68 FR 18025, Apr. 14, 2003, as amended at 69 FR 60818, Oct. 13, 2004]

§ 63.7324 What procedures must I use to demonstrate initial compliance with the opacity limits?

(a) You must conduct each performance test that applies to your affected source according to the requirements in paragraph (b) of this section.

(b) To determine compliance with the daily average opacity limit for stacks of 15 percent for a by-product coke oven battery on a normal coking cycle or 20 percent for a by-product coke oven battery on batterywide extended coking, follow the test methods and procedures in paragraphs (b)(1) through (3) of this section.

(1) Using the continuous opacity monitoring system (COMS) required in §63.7330(e), measure and record the opacity of emissions from each battery stack for a 24-hour period.

(2) Reduce the monitoring data to hourly averages as specified in §63.8(g)(2).

(3) Compute and record the 24-hour (daily) average of the COMS data.

§ 63.7325 What test methods and other procedures must I use to demonstrate initial compliance with the TDS or constituent limits for quench water?

(a) If you elect the TDS limit for quench water in §63.7295(a)(1)(i), you must conduct each performance test that applies to your affected source according to the conditions in paragraphs (a)(1) and (2) of this section.

(1) Take the quench water sample from a location that provides a representative sample of the quench water as applied to the coke (*e.g.,* from the header that feeds water to the quench tower reservoirs). Conduct sampling under normal and representative operating conditions.

(2) Determine the TDS concentration of the sample using Method 160.1 in 40 CFR part 136.3 (see "residue—filterable"), except that you must dry the total filterable residue at 103 to 105 °C (degrees Centigrade) instead of 180 °C.

(b) If at any time you elect to meet the alternative requirements for quench water in §63.7295(a)(1)(ii), you must establish a site-specific constituent limit according to the procedures in paragraphs (b)(1) through (4) of this section.

(1) Take a minimum of nine quench water samples from a location that provides a representative sample of the quench water as applied to the coke (*e.g.,* from the header that feeds water to the quench tower reservoirs). Conduct sampling under normal and representative operating conditions.

(2) For each sample, determine the TDS concentration according to the requirements in paragraph (a)(2) of this section and the concentration of benzene, benzo(a)pyrene, and naphthalene using the applicable methods in 40 CFR part 136 or an approved alternative method.

(3) Determine and record the highest sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in any sample that has a TDS concentration less than or equal to the TDS limit of 1,100 mg/L. This concentration is the site-specific constituent limit.

(4) Submit the site-specific limit, sampling results, and all supporting data and calculations to your permitting authority for review and approval.

§ 63.7326 How do I demonstrate initial compliance with the emission limitations that apply to me?

(a) For each coke oven battery subject to the emission limit for particulate matter from a control device applied to pushing emissions, you have demonstrated initial compliance if you meet the requirements in paragraphs (a)(1) through (4) of this section that apply to you.

(1) The concentration of particulate matter, measured in accordance with the performance test procedures in §63.7322(b)(1) and (2), did not exceed 0.01 gr/dscf for a control device where a cokeside shed is used to capture pushing emissions or the process-weighted mass rate of particulate matter (lb/ton of coke), measured in accordance with the performance test procedures in §63.7322(b)(1) through (4), did not exceed:

(i) 0.02 lb/ton of coke if a moveable hood vented to a stationary control device is used to capture emissions;

(ii) If a mobile scrubber car that does not capture emissions during travel is used, 0.03 lb/ton of coke from a control device applied to pushing emissions from a short coke oven battery or 0.01 lb/ton of coke from a control device applied to pushing emissions from a tall coke oven battery; and

(iii) 0.04 lb/ton of coke if a mobile control device that captures emissions during travel is used.

(2) For each venturi scrubber applied to pushing emissions, you have established appropriate site-specific operating limits and have a record of the pressure drop and scrubber water flow rate measured during the performance test in accordance with §63.7323(a).

(4) For each capture system applied to pushing emissions, you have established an appropriate site-specific operating limit, and:

(ii) If you elect the operating limit in §63.7290(b)(3)(i) for fan motor amperes, you have a record of the fan motor amperes during the performance test in accordance with §63.7323(c)(2); or

(iii) If you elect the operating limit in §63.7290(b)(3)(ii) for static pressure or fan RPM, you have a record of the static pressure at the inlet of the control device or fan RPM measured during the performance test in accordance with §63.7323(c)(3).

(b) For each new or existing by-product coke oven battery subject to the opacity limit for stacks in §63.7296(a), you have demonstrated initial compliance if the daily average opacity, as measured according to the performance test procedures in §63.7324(b), is no more than 15 percent for a battery on a normal coking cycle or 20 percent for a battery on batterywide extended coking.

(c) For each new or existing by-product coke oven battery subject to the TDS limit or constituent limits for quench water in §63.7295(a)(1),

(1) You have demonstrated initial compliance with the TDS limit in §63.7295(a)(1)(i) if the TDS concentration, as measured according to the performance test procedures in §63.7325(a), does not exceed 1,100 mg/L.

(2) You have demonstrated initial compliance with the constituent limit in §63.7295(a)(1)(ii) if:

(i) You have established a site-specific constituent limit according to the procedures in §63.7325(b); and

(ii) The sum of the constituent concentrations, as measured according to the performance test procedures in §63.7325(c), is less than or equal to the site-specific limit.

(d) For each by-product coke oven battery stack subject to an opacity limit in §63.7296(a) and each by-product coke oven battery subject to the requirements for quench water in §63.7295(a)(1), you must submit a notification of compliance status containing the results of the COMS performance test for battery stacks and the quench water performance test (TDS or constituent limit) according to §63.7340(e)(1). For each particulate matter emission limitation that applies to you, you must submit a notification of compliance status containing the results of the performance test according to §63.7340(e)(2).

[68 FR 18025, Apr. 14, 2003, as amended at 69 FR 60819, Oct. 13, 2004]

§ 63.7327 How do I demonstrate initial compliance with the work practice standards that apply to me?

(a) For each by-product coke oven battery with vertical flues subject to the work practice standards for fugitive pushing emissions in §63.7291(a), you have demonstrated initial compliance if you certify in your notification of compliance status that you will meet each of the work practice requirements beginning no later than the compliance date that is specified in §63.7283.

(d) For each by-product coke oven battery subject to the work practice standards for soaking in §63.7294, you have demonstrated initial compliance if you have met the requirements of paragraphs (d)(1) and (2) of this section:

(1) You have prepared and submitted a written work practice plan in accordance with §63.7294(a); and

(2) You certify in your notification of compliance status that you will meet each of the work practice requirements beginning no later than the compliance date that is specified in §63.7283.

(e) For each coke oven battery, you have demonstrated initial compliance with the work practice standards for quenching in §63.7295(b) if you certify in your notification of compliance status that you have met the requirements of paragraphs (e)(1) and (2) of this section:

(1) You have installed the required equipment in each quench tower; and

(2) You will meet each of the work practice requirements beginning no later than the compliance date that is specified in §63.7283.

(f) For each work practice standard that applies to you, you must submit a notification of compliance status according to the requirements in §63.7340(e)(1).

§ 63.7328 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

You have demonstrated initial compliance if you certify in your notification of compliance status that you have met the requirements of paragraphs (a) through (d) of this section:

(a) You have prepared the operation and maintenance plans according to the requirements in §63.7300(b) and (c);

(b) You will operate each by-product coke oven battery and each capture system and control device applied to pushing emissions from a coke oven battery according to the procedures in the plans beginning no later than the compliance date that is specified in §63.7283;

(c) You have prepared a site-specific monitoring plan according to the requirements in §63.7331(b); and

(d) You submit a notification of compliance status according to the requirements in §63.7340(e).

Continuous Compliance Requirements

§ 63.7330 What are my monitoring requirements?

(a) For each baghouse applied to pushing emissions from a coke oven battery, you must at all times monitor the relative change in particulate matter loadings using a bag leak detection system according to the requirements in §63.7331(a) and conduct inspections at their specified frequency according to the requirements in paragraphs (a)(1) through (8) of this section.

(1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual;

(2) Confirm that dust is being removed from hoppers through weekly visual inspections or equivalent means of ensuring the proper functioning of removal mechanisms;

(3) Check the compressed air supply for pulse-jet baghouses each day;

(4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology;

(5) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means;

(6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or laying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices;

(7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks; and

(8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

(b) For each venturi scrubber applied to pushing emissions, you must at all times monitor the pressure drop and water flow rate using a CPMS according to the requirements in §63.7331(e).

(d) For each capture system applied to pushing emissions, you must at all times monitor the volumetric flow rate according to the requirements in §63.7331(g), the fan motor amperes according to the requirements in §63.7331(h), or the static pressure or the fan RPM according to the requirements in §63.7331(i).

(e) For each by-product coke oven battery, you must monitor at all times the opacity of emissions exiting each stack using a COMS according to the requirements in §63.7331(j).

[68 FR 18025, Apr. 14, 2003, as amended at 69 FR 60819, Oct. 13, 2004]

§ 63.7331 What are the installation, operation, and maintenance requirements for my monitors?

(a) For each baghouse applied to pushing emissions, you must install, operate, and maintain each bag leak detection system according to the requirements in paragraphs (a)(1) through (7) of this section.

(1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less;

(2) The system must provide output of relative changes in particulate matter loadings;

(3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over a preset level. The alarm must be located such that it can be heard by the appropriate plant personnel;

(4) Each system that works based on the triboelectric effect must be installed, operated, and maintained in a manner consistent with the guidance document, “Fabric Filter Bag Leak Detection Guidance” (EPA–454/R–98–015, September 1997). You may install, operate, and maintain other types of bag leak detection systems in a manner consistent with the manufacturer's written specifications and recommendations;

(5) To make the initial adjustment of the system, establish the baseline output by adjusting the sensitivity (range) and the averaging period of the device. Then, establish the alarm set points and the alarm delay time;

(6) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in your operation and maintenance plan. Do not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365-day period unless a responsible official certifies, in writing, that the baghouse has been inspected and found to be in good operating condition; and

(7) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(b) For each CPMS required in §63.7330, you must develop and make available for inspection upon request by the permitting authority a site-specific monitoring plan that addresses the requirements in paragraphs (b)(1) through (6) of this section.

(1) Installation of the CPMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.,* on or downstream of the last control device);

(2) Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system;

(3) Performance evaluation procedures and acceptance criteria (*e.g.,* calibrations);

(h) If you elect the operating limit in §63.7290(b)(3)(i) for a capture system applied to pushing emissions, you must install, operate, and maintain a device to measure the fan motor amperes.

(i) If you elect the operating limit in §63.7290(b)(3)(ii) for a capture system applied to pushing emissions, you must install, operate and maintain a device to measure static pressure at the inlet of the control device or the fan RPM.

(j) For each by-product coke oven battery, you must install, operate, and maintain a COMS to measure and record the opacity of emissions exiting each stack according to the requirements in paragraphs (j)(1) through (5) of this section.

(1) You must install, operate, and maintain each COMS according to the requirements in §63.8(e) and Performance Specification 1 in 40 CFR part 60, appendix B. Identify periods the COMS is out-of-control, including any periods that the COMS fails to pass a daily calibration drift assessment, quarterly performance audit, or annual zero alignment audit.

(2) You must conduct a performance evaluation of each COMS according to the requirements in §63.8 and Performance Specification 1 in appendix B to 40 CFR part 60;

(3) You must develop and implement a quality control program for operating and maintaining each COMS according to the requirements in §63.8(d). At minimum, the quality control program must include a daily calibration drift assessment, quarterly performance audit, and an annual zero alignment audit of each COMS;

(4) Each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. You must reduce the COMS data as specified in §63.8(g)(2).

(5) You must determine and record the hourly and daily (24-hour) average opacity according to the procedures in §63.7324(b) using all the 6-minute averages collected for periods during which the COMS is not out-of-control.

[68 FR 18025, Apr. 14, 2003, as amended at 69 FR 60819, Oct. 13, 2004]

§ 63.7332 How do I monitor and collect data to demonstrate continuous compliance?

(a) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times the affected source is operating.

(b) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels, or in fulfilling a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitor to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

§ 63.7333 How do I demonstrate continuous compliance with the emission limitations that apply to me?

(a) For each control device applied to pushing emissions and subject to the emission limit in §63.7290(a), you must demonstrate continuous compliance by meeting the requirements in paragraphs (a)(1) and (2) of this section:

(1) Maintaining emissions of particulate matter at or below the applicable limits in paragraphs §63.7290(a)(1) through (4); and

(2) Conducting subsequent performance tests to demonstrate continuous compliance no less frequently than twice during each term of your title V operating permit (at mid-term and renewal).

(b) For each venturi scrubber applied to pushing emissions and subject to the operating limits in §63.7290(b)(1), you must demonstrate continuous compliance by meeting the requirements in paragraphs (b)(1) through (3) of this section.

(1) Maintaining the daily average pressure drop and scrubber water flow rate at levels no lower than those established during the initial or subsequent performance test.

(2) Operating and maintaining each CPMS according to §63.7331(b) and recording all information needed to document conformance with these requirements.

(3) Collecting and reducing monitoring data for pressure drop and scrubber water flow rate according to §63.7331(e)(1) through (3).

(d) For each capture system applied to pushing emissions and subject to the operating limit in §63.7290(b)(3), you must demonstrate continuous compliance by meeting the requirements in paragraph (d)(1), (2), or (3) of this section:

(2) If you elect the operating limit for fan motor amperes in §63.7290(b)(3)(i):

(i) Maintaining the daily average fan motor amperages at or above the minimum level established during the initial or subsequent performance test; and

(ii) Checking the fan motor amperage at least every 8 hours to verify the daily average is at or above the minimum level established during the initial or subsequent performance test and recording the results of each check.

(3) If you elect the operating limit for static pressure or fan RPM in §63.7290(b)(3)(ii):

(i) Maintaining the daily average static pressure at the inlet to the control device at an equal or greater vacuum than established during the initial or subsequent performance test or the daily average fan RPM at or above the minimum level established during the initial or subsequent performance test; and

(ii) Checking the static pressure or fan RPM at least every 8 hours to verify the daily average static pressure at the inlet to the control device is at an equal or greater vacuum than established during the initial or subsequent performance test or the daily average fan RPM is at or above the minimum level established during the initial or subsequent performance test and recording the results of each check.

(e) Beginning on the first day compliance is required under §63.7283, you must demonstrate continuous compliance for each by-product coke oven battery subject to the opacity limit for stacks in §63.7296(a) by meeting the requirements in paragraphs (e)(1) and (2) of this section:

(1) Maintaining the daily average opacity at or below 15 percent for a battery on a normal coking cycle or 20 percent for a battery on batterywide extended coking; and

(2) Operating and maintaining a COMS and collecting and reducing the COMS data according to §63.7331(j).

(f) Beginning on the first day compliance is required under §63.7283, you must demonstrate continuous compliance with the TDS limit for quenching in §63.7295(a)(1)(i) by meeting the requirements in paragraphs (f)(1) and (2) of this section:

(1) Maintaining the TDS content of the water used to quench hot coke at 1,100 mg/L or less; and

(2) Determining the TDS content of the quench water at least weekly according to the requirements in §63.7325(a) and recording the sample results.

(g) Beginning on the first day compliance is required under §63.7283, you must demonstrate continuous compliance with the constituent limit for quenching in §63.7295(a)(1)(ii) by meeting the requirements in paragraphs (g)(1) and (2) of this section:

(1) Maintaining the sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in the water used to quench hot coke at levels less than or equal to the site-specific limit approved by the permitting authority; and

(2) Determining the sum of the constituent concentrations at least monthly according to the requirements in §63.7325(c) and recording the sample results.

[68 FR 18025, Apr. 14, 2003, as amended at 69 FR 60819, Oct. 13, 2004]

§ 63.7334 How do I demonstrate continuous compliance with the work practice standards that apply to me?

(a) For each by-product coke oven battery with vertical flues subject to the work practice standards for fugitive pushing emissions in §63.7291(a), you must demonstrate continuous compliance according to the requirements of paragraphs (a)(1) through (8) of this section:

(1) Observe and record the opacity of fugitive emissions for four consecutive pushes per operating day, except you may make fewer or non-consecutive observations as permitted by §63.7291(a)(3). Maintain records of the pushing schedule for each oven and records indicating the legitimate operational reason for any change in the pushing schedule according to §63.7291(a)(4).

(2) Observe and record the opacity of fugitive emissions from each oven in a battery at least once every 90 days. If an oven cannot be observed during a 90-day period, observe and record the opacity of the first push of that oven following the close of the 90-day period that can be read in accordance with the procedures in paragraphs (a)(1) through (8) of this section.

(3) Make all observations and calculations for opacity observations of fugitive pushing emissions in accordance with Method 9 in appendix A to 40 CFR part 60 using a Method 9 certified observer unless you have an approved alternative procedure under paragraph (a)(7) of this section.

(4) Record pushing opacity observations at 15-second intervals as required in section 2.4 of Method 9 (appendix A to 40 CFR part 60). The requirement in section 2.4 of Method 9 for a minimum of 24 observations does not apply, and the data reduction requirements in section 2.5 of Method 9 do not apply. The requirement in §63.6(h)(5)(ii)(B) for obtaining at least 3 hours of observations (thirty 6-minute averages) to demonstrate initial compliance does not apply.

(5) If fewer than six but at least four 15-second observations can be made, use the average of the total number of observations to calculate average opacity for the push. Missing one or more observations during the push (*e.g.,* as the quench car passes behind a building) does not invalidate the observations before or after the interference for that push. However, a minimum of four 15-second readings must be made for a valid observation.

(6) Begin observations for a push at the first detectable movement of the coke mass. End observations of a push when the quench car enters the quench tower.

(i) For a battery without a cokeside shed, observe fugitive pushing emissions from a position at least 10 meters from the quench car that provides an unobstructed view and avoids interferences from the topside of the battery. This may require the observer to be positioned at an angle to the quench car rather than perpendicular to it. Typical interferences to avoid include emissions from open standpipes and charging. Observe the opacity of emissions above the battery top with the sky as the background where possible. Record the oven number of any push not observed because of obstructions or interferences.

(ii) For a battery with a cokeside shed, the observer must be in a position that provides an unobstructed view and avoids interferences from the topside of the battery. Typical interferences to avoid include emissions from open standpipes and charging. Observations must include any fugitive emissions that escape from the top of the shed, from the ends of the shed, or from the area where the shed is joined to the battery. If the observer does not have a clear view to identify when a push starts or ends, a second person can be positioned to signal the start or end of the push and notify the observer when to start or end the observations. Radio communications with other plant personnel (*e.g.,* pushing ram operator or quench car operator) may also serve to notify the observer of the start or end of a push. Record the oven number of any push not observed because of obstructions or interferences.

(iii) You may reposition after the push to observe emissions during travel if necessary.

(7) If it is infeasible to implement the procedures in paragraphs (a)(1) through (6) of this section for an oven due to physical obstructions, nighttime pushes, or other reasons, you may apply to your permitting authority for permission to use an alternative procedure. The application must provide a detailed explanation of why it is infeasible to use the procedures in paragraphs (a)(1) through (6) of this section, identify the oven and battery numbers, and describe the alternative procedure. An alternative procedure must identify whether the coke in that oven is not completely coked, either before, during, or after an oven is pushed.

(8) For each oven observed that exceeds an opacity of 30 percent for any short battery or 35 percent for any tall battery, you must take corrective action and/or increase the coking time in accordance with §63.7291(a). Maintain records documenting conformance with the requirements in §63.7291(a).

(d) For each by-product coke oven battery subject to the work practice standard for soaking in §63.7294(a), you must demonstrate continuous compliance by maintaining records that document conformance with requirements in §63.7294(a)(1) through (5).

(e) For each coke oven battery subject to the work practice standard for quenching in §63.7295(b), you must demonstrate continuous compliance according to the requirements of paragraphs (e)(1) through (3) of this section:

(1) Maintaining baffles in each quench tower such that no more than 5 percent of the cross-sectional area of the tower is uncovered or open to the sky as required in §63.7295(b)(1);

(2) Maintaining records that document conformance with the washing, inspection, and repair requirements in §63.7295(b)(2), including records of the ambient temperature on any day that the baffles were not washed; and

(3) Maintaining records of the source of makeup water to document conformance with the requirement for acceptable makeup water in §63.7295(a)(2).

§ 63.7335 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?

(a) For each by-product coke oven battery, you must demonstrate continuous compliance with the operation and maintenance requirements in §63.7300(b) by adhering at all times to the plan requirements and recording all information needed to document conformance.

(b) For each coke oven battery with a capture system or control device applied to pushing emissions, you must demonstrate continuous compliance with the operation and maintenance requirements in §63.7300(c) by meeting the requirements of paragraphs (b)(1) through (3) of this section:

(1) Making monthly inspections of capture systems according to §63.7300(c)(1) and recording all information needed to document conformance with these requirements;

(2) Performing preventative maintenance for each control device according to §63.7300(c)(2) and recording all information needed to document conformance with these requirements; and

(3) Initiating and completing corrective action for a bag leak detection system alarm according to §63.7300(c)(3) and recording all information needed to document conformance with these requirements. This includes records of the times the bag leak detection system alarm sounds, and for each valid alarm, the time you initiated corrective action, the corrective action(s) taken, and the date on which corrective action is completed.

(c) To demonstrate continuous compliance with the operation and maintenance requirements for a baghouse applied to pushing emissions from a coke oven battery in §63.7331(a), you must inspect and maintain each baghouse according to the requirements in §63.7331(a)(1) through (8) and record all information needed to document conformance with these requirements. If you increase or decrease the sensitivity of the bag leak detection system beyond the limits specified in §63.7331(a)(6), you must include a copy of the required written certification by a responsible official in the next semiannual compliance report.

(d) You must maintain a current copy of the operation and maintenance plans required in §63.7300(b) and (c) onsite and available for inspection upon request. You must keep the plans for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

§ 63.7336 What other requirements must I meet to demonstrate continuous compliance?

(a) *Deviations.* You must report each instance in which you did not meet each emission limitation in this subpart that applies to you. This includes periods of startup, shutdown, and malfunction. You must also report each instance in which you did not meet each work practice standard or operation and maintenance requirement in this subpart that applies to you. These instances are deviations from the emission limitations (including operating limits), work practice standards, and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements in §63.7341.

(b) *Startup, shutdowns, and malfunctions.* (1) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.6(e)(1).

(2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

[68 FR 18025, Apr. 14, 2003, as amended at 71 FR 20467, Apr. 20, 2006]

Notification, Reports, and Records

§ 63.7340 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e) and (f)(4), and 63.9(b) through (h) that apply to you by the specified dates.

(b) As specified in §63.9(b)(2), if you startup your affected source before April 14, 2003, you must submit your initial notification no later than August 12, 2003.

(c) As specified in §63.9(b)(3), if you startup your new affected source on or after April 14, 2003, you must submit your initial notification no later than 120 calendar days after you become subject to this subpart.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in §63.7(b)(1).

(e) If you are required to conduct a performance test, opacity observation, or other initial compliance demonstration, you must submit a notification of compliance status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration that does not include a performance test, you must submit the notification of compliance status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration that does include a performance test, you must submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following completion of the performance test according to §63.10(d)(2).

§ 63.7341 What reports must I submit and when?

(a) *Compliance report due dates.* Unless the Administrator has approved a different schedule, you must submit quarterly compliance reports for battery stacks and semiannual compliance reports for all other affected sources to your permitting authority according to the requirements in paragraphs (a)(1) through (4) of this section.

(1) The first quarterly compliance report for battery stacks must cover the period beginning on the compliance date that is specified for your affected source in §63.7283 and ending on the last date of the third calendar month. Each subsequent compliance report must cover the next calendar quarter.

(2) The first semiannual compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7283 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your affected source. Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(3) All quarterly compliance reports for battery stacks must be postmarked or delivered no later than one calendar month following the end of the quarterly reporting period. All semiannual compliance reports must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(4) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (a)(1) through (3) of this section.

(b) *Quarterly compliance report contents.* Each quarterly report must provide information on compliance with the emission limitations for battery stacks in §63.7296. The reports must include the information in paragraphs (c)(1) through (3), and as applicable, paragraphs (c)(4) through (8) of this section.

(c) *Semiannual compliance report contents.* Each compliance report must provide information on compliance with the emission limitations, work practice standards, and operation and maintenance requirements for all affected sources except battery stacks. The reports must include the information in paragraphs (c)(1) through (3) of this section, and as applicable, paragraphs (c)(4) through (8) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with the official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there were no deviations from the continuous compliance requirements in §63.7333(e) for battery stacks, a statement that there were no deviations from the emission limitations during the reporting period. If there were no deviations from the continuous compliance requirements in §§63.7333 through 63.7335 that apply to you (for all affected sources other than battery stacks), a statement that there were no deviations from the emission limitations, work practice standards, or operation and maintenance requirements during the reporting period.

(6) If there were no periods during which a continuous monitoring system (including COMS, continuous emission monitoring system (CEMS), or CPMS) was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which a continuous monitoring system was out-of-control during the reporting period.

(7) For each deviation from an emission limitation in this subpart (including quench water limits) and for each deviation from the requirements for work practice standards in this subpart that occurs at an affected source where you are not using a continuous monitoring system (including a COMS, CEMS, or CPMS) to comply with the emission limitations in this subpart, the compliance report must contain the information in paragraphs (c)(4) and (7)(i) and (ii) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The total operating time of each affected source during the reporting period.

(ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable and the corrective action taken.

(8) For each deviation from an emission limitation occurring at an affected source where you are using a continuous monitoring system (including COMS, CEMS, or CPMS) to comply with the emission limitation in this subpart, you must include the information in paragraphs (c)(4) and (8)(i) through (xii) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The date and time that each malfunction started and stopped.

(ii) The date and time that each continuous monitoring system (including COMS, CEMS, or CPMS) was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous monitoring system (including COMS, CEMS, or CPMS) was out-of-control, including the information in §63.8(c)(8).

(iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(v) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.

(viii) An identification of each HAP that was monitored at the affected source.

(ix) A brief description of the process units.

(x) A brief description of the continuous monitoring system.

(xi) The date of the latest continuous monitoring system certification or audit.

(xii) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

(d) *Immediate startup, shutdown, and malfunction report.* If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements in §63.10(d)(5)(ii).

(e) *Part 70 monitoring report.* If you have obtained a title V operating permit for an affected source pursuant to 40 CFR part 70 or 40 CFR part 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emission limitation or work practice standard in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements to your permitting authority.

§ 63.7342 What records must I keep?

(a) You must keep the records specified in paragraphs (a)(1) through (3) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, performance evaluations, and opacity observations as required in §63.10(b)(2)(viii).

(b) For each COMS or CEMS, you must keep the records specified in paragraphs (b)(1) through (4) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Monitoring data for COMS during a performance evaluation as required in §63.6(h)(7)(i) and (ii).

(3) Previous (that is, superceded) versions of the performance evaluation plan as required in §63.8(d)(3).

(4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(c) You must keep the records in §63.6(h)(6) for visual observations.

(d) You must keep the records required in §§63.7333 through 63.7335 to show continuous compliance with each emission limitation, work practice standard, and operation and maintenance requirement that applies to you.

§ 63.7343 In what form and how long must I keep my records?

(a) You must keep your records in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records offsite for the remaining 3 years.

Other Requirements and Information

§ 63.7350 What parts of the General Provisions apply to me?

Table 1 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§ 63.7351 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the United States Environmental Protection Agency (U.S. EPA), or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities in paragraphs (c)(1) through (6) of this section will not be delegated to State, local, or tribal agencies.

(1) Approval of alternatives to work practice standards for fugitive pushing emissions in §63.7291(a) for a by-product coke oven battery with vertical flues, fugitive pushing emissions in §63.7292(a) for a by-product coke oven battery with horizontal flues, fugitive pushing emissions in §63.7293 for a non-recovery coke oven battery, soaking for a by-product coke oven battery in §63.7294(a), and quenching for a coke oven battery in §63.7295(b) under §63.6(g).

(2) Approval of alternative opacity emission limitations for a by-product coke oven battery under §63.6(h)(9).

(3) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90, except for alternative procedures in §63.7334(a)(7).

(4) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(5) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

§ 63.7352 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA), in §63.2, and in this section as follows:

Acceptable makeup water means surface water from a river, lake, or stream; water meeting drinking water standards; storm water runoff and production area clean up water except for water from the by-product recovery plant area; process wastewater treated to meet effluent limitations guidelines in 40 CFR part 420; water from any of these sources that has been used only for non-contact cooling or in water seals; or water from scrubbers used to control pushing emissions.

Backup quench station means a quenching device that is used for less than 5 percent of the quenches from any single coke oven battery in the 12-month period from July 1 to June 30.

Baffles means an apparatus comprised of obstructions for checking or deflecting the flow of gases. Baffles are installed in a quench tower to remove droplets of water and particles from the rising vapors by providing a point of impact. Baffles may be installed either inside or on top of quench towers and are typically constructed of treated wood, steel, or plastic.

Battery stack means the stack that is the point of discharge to the atmosphere of the combustion gases from a battery's underfiring system.

Batterywide extended coking means increasing the average coking time for all ovens in the coke oven battery by 25 percent or more over the manufacturer's specified design rate.

By-product coke oven battery means a group of ovens connected by common walls, where coal undergoes destructive distillation under positive pressure to produce coke and coke oven gas from which by-products are recovered.

By-product recovery plant area means that area of the coke plant where process units subject to subpart L in part 61 are located.

Coke oven battery means a group of ovens connected by common walls, where coal undergoes destructive distillation to produce coke. A coke oven battery includes by-product and non-recovery processes.

Coke plant means a facility that produces coke from coal in either a by-product coke oven battery or a non-recovery coke oven battery.

Cokeside shed means a structure used to capture pushing emissions that encloses the cokeside of the battery and ventilates the emissions to a control device.

Coking time means the time interval that starts when an oven is charged with coal and ends when the oven is pushed.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limitation (including operating limits) or work practice standard;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Emission limitation means any emission limit, opacity limit, or operating limit.

Four consecutive pushes means four pushes observed successively.

Fugitive pushing emissions means emissions from pushing that are not collected by a capture system.

Horizontal flue means a type of coke oven heating system used on Semet-Solvay batteries where the heating flues run horizontally from one end of the oven to the other end, and the flues are not shared with adjacent ovens.

Hot water scrubber means a mobile scrubber used to control pushing emissions through the creation of an induced draft formed by the expansion of pressurized hot water through a nozzle.

Increased coking time means increasing the charge-to-push time for an individual oven.

Non-recovery coke oven battery means a group of ovens connected by common walls and operated as a unit, where coal undergoes destructive distillation under negative pressure to produce coke, and which is designed for the combustion of the coke oven gas from which by-products are not recovered.

Oven means a chamber in the coke oven battery in which coal undergoes destructive distillation to produce coke.

Pushing means the process of removing the coke from the oven. Pushing begins with the first detectable movement of the coke mass and ends when the quench car enters the quench tower.

Quenching means the wet process of cooling (wet quenching) the hot incandescent coke by direct contact with water that begins when the quench car enters the quench tower and ends when the quench car exits the quench tower.

Quench tower means the structure in which hot incandescent coke in the quench car is deluged or quenched with water.

Remove from service means that an oven is not charged with coal and is not used for coking. When removed from service, the oven may remain at the operating temperature or it may be cooled down for repairs.

Responsible official means responsible official as defined in §63.2.

Short battery means a by-product coke oven battery with ovens less than five meters in height.

Soaking means that period in the coking cycle that starts when an oven is dampered off the collecting main and vented to the atmosphere through an open standpipe prior to pushing and ends when the coke begins to be pushed from the oven.

Soaking emissions means the discharge from an open standpipe during soaking of visible emissions due to either incomplete coking or leakage into the standpipe from the collecting main.

Standpipe means an apparatus on the oven that provides a passage for gases from an oven to the atmosphere when the oven is dampered off the collecting main and the standpipe cap is opened. This includes mini-standpipes that are not connected to the collecting main.

Tall battery means a by-product coke oven battery with ovens five meters or more in height.

Vertical flue means a type of coke oven heating system in which the heating flues run vertically from the bottom to the top of the oven, and flues are shared between adjacent ovens.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

Table 1 to Subpart CCCCC of Part 63—Applicability of General Provisions to Subpart CCCCC

As required in §63.7350, you must comply with each applicable requirement of the NESHAP General Provisions (40 CFR part 63, subpart A) as shown in the following table:

Citation	Subject	Applies to Subpart CCCCC?	Explanation
§63.1	Applicability	Yes	
§63.2	Definitions	Yes	
§63.3	Units and Abbreviations	Yes	
§63.4	Prohibited Activities	Yes	
§63.5	Construction/Reconstruction	Yes	
§63.6(a), (b), (c), (d), (e), (f), (g), (h)(2)–(8)	Compliance with Standards and Maintenance Requirements	Yes	
§63.6(h)(9)	Adjustment to an Opacity Emission Standard	Yes	
§63.7(a)(3), (b), (c)–(h)	Performance Testing Requirements	Yes	
§63.7(a)(1)–(2)	Applicability and Performance Test Dates	No	Subpart CCCCC specifies applicability and dates.
§63.8(a)(1)–(3), (b), (c)(1)–(3), (c)(4)(i)–(ii), (c)(5)–(8), (d), (e), (f)(1)–(5), (g)(1)–(4)	Monitoring Requirements	Yes	CMS requirements in §63.8(c)(4) (i)–(ii), (c)(5), and (c)(6) apply only to COMS for battery stacks.

Citation	Subject	Applies to Subpart CCCCC?	Explanation
§63.8(a)(4)	Additional Monitoring Requirements for Control Devices in §63.11	No	Flares are not a control device for Subpart CCCCC affected sources.
§63.8(c)(4)	Continuous Monitoring System (CMS) Requirements	No	Subpart CCCCC specifies requirements for operation of CMS.
§63.8(e)(4)–(5)	Performance Evaluations	Yes	Except COMS performance evaluation must be conducted before the compliance date.
§63.8(f)(6)	RATA Alternative	No	Subpart CCCCC does not require CEMS.
§63.8(g)(5)	Data Reduction	No	Subpart CCCCC specifies data that can't be used in computing averages for COMS.
§63.9	Notification Requirements	Yes	Additional notifications for CMS in §63.9(g) apply only to COMS for battery stacks.
§63.10(a), (b)(1)–(b)(2)(xii), (b)(2)(xiv), (b)(3), (c)(1)–(6), (c)(9)–(15), (d), (e)(1)–(2), (e)(4), (f)	Recordkeeping and Reporting Requirements	Yes.	Additional records for CMS in §63.10(c)(1)–(6), (9)–(15), and reports in §63.10(d)(1)–(2) apply only to COMS for battery stacks.
§63.10(b)(2) (xi)–(xii)	CMS Records for RATA Alternative	No	Subpart CCCCC doesn't require CEMS.
§63.10(c)(7)–(8)	Records of Excess Emissions and Parameter Monitoring Exceedances for CMS	No	Subpart CCCCC specifies record requirements.
§63.10(e)(3)	Excess Emission Reports	No	Subpart CCCCC specifies reporting requirements.
§63.11	Control Device Requirements	No	Subpart CCCCC does not require flares.
§63.12	State Authority and Delegations.	Yes	
§§63.13–63.15	Addresses, Incorporation by Reference, Availability of Information	Yes	

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: One (1) Coke Plant By-Product Recovery Plant

(a) Control Station No. 1

(1) Four (4) Predecanters D-101A, D-101B, D-101C and D-101D, identified as CBP10100, CBP20101, CBP30102 and CBP30103, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station No. 1 and into the 72- inch Suction Main.

(2) Two (2) Still Decanters D-102B and D-102A, identified as CBD00104 and CBD00105, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station 1 and into the 72-inch Suction Main.

(3) Two (2) Gary Decanters D-5 and D-4, identified as CBD20107 and CBD30108, constructed in 1975, with vapors directed by a natural gas blanket system CB3080 to Control Station No. 1 and into the 72-inch Suction Main.

(4) One (1) Bleed-Off Tank B101, identified as CBB10106, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station No. 1 and into the 72 inch Suction Main.

(5) One (1) Liquor Storage Tank T-7, identified as CBL10109, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station No. 1 into the 72-inch Suction Main.

(6) Two (2) Tar Storage Tanks T-2 and T-3, identified as CBT00110 and CBT00111, constructed in 1968, with vapors, directed by a natural gas blanketing system CB3080 to Control Station No. 1 and into the 72-inch Suction Main.

(7) One (1) Storage Tank T-6, identified as CBT20112, constructed in 1968, with vapors, directed by a natural gas blanketing system CB3080 to Control Station No. 1 and into the 72-inch Suction Main.

(8) Two (2) PC Tar Storage Tanks T-363D and T-363A, identified as CBT30113 and CB40114, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station No. 1 into the 72-inch Suction Main.

(9) One (1) Dry Tar Storage Tank T-9, identified as CBT50115, constructed in 1975, with vapors directed by a natural gas blanketing system CB3080 to Control Station No. 1 and into the 72 inch Suction Main.

(10) One (1) Sump S-9 serving Dry Tar Storage Tank ST-9, identified as CBS10116, constructed in 1991, with vapors, directed by a natural gas blanketing system CB3080 to Control Station No. 1 and into the 72-inch Suction Main.

(b) Control Station No. 2

(1) Three (3) Tar Tanks T-304C, T-304B and T-304A , identified as CBT60118, CBT70119, and CBT80121, constructed in 1990, 1953 and 1953, respectively, with vapors directed by a natural gas blanketing system CB3081 to Control Station No. 2 and into the 72-inch Suction Main.

(2) One (1) Tar Feed Tank T-306C, identified as CBTF0164, constructed in 1953, with vapors directed by a natural gas blanketing system CB3081 to Control Station No. 2 and into the 72 inch Suction Main.

(3) One (1) Wash Oil Tank T-331AN, identified as CBO10123, constructed in 1961, with vapors directed by a natural gas blanketing system CB3081 to Control Station No. 2 into the 72-inch Suction Main.

(4) Two (2) Light Oil Storage Tanks T-312 and T-311, identified as CBO20124 and CBO30125, constructed in 1953, with vapors directed by a natural gas blanketing system CB3081 to Control Station No. 2 and into the 72-inch Suction Main.

(5) One (1) sump S-304/306, constructed in 1996, with vapors directed by a natural gas blanketing system CB3081 to Control Station No. 2 and into the 72-inch Suction Main.

(c) Control Station No. 3

(1) Four (4) Predecanters D-105A, D-105B, D-105C and D-105D, identified as CBP70137, CBP80138, CBP50139 and CBP60140, constructed in 1976, with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.

(2) Two (2) Still Decanters D-106A and D-106B, identified as CBD60134 and CBD70136, constructed in 1976, with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.

(3) Two (2) Gary Decanters D-6 and D-7, identified as CBD40132 and CBD50133, constructed in 1976, with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.

(4) Two (2) Tar Decanters D-5/7N and D-5/7S, identified as CBD80141 and CBD90142, constructed in 1953, with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.

(5) One (1) Bleed-Off Tank B-104, identified as CBB20135, constructed in 1976 with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.

(6) One (1) Liquor Surge Tank T-11, identified as CBL60131, constructed in 1975, with vapors directed by a natural gas blanketing system CB3082 to Control Station No. 3 and into the 72-inch Suction Main.

(d) Control Station No. 4

(1) Four (4) Circulating Liquor Decanters L-100B, L-100C, L-100D and L-100E, identified as CBC30127, CBC40128, CBC50129 and CBL80145, constructed in 1975, with vapors directed by a natural gas blanketing system CB3083 to Control Station No. 4 and into the 72-inch Suction Main.

(2) Two (2) Liquor Surge Tanks T-340A and T-340B, identified as CBC20126 and CBL70143, constructed in 1995, with vapors directed by a natural gas blanketing system CB3083 to Control Station No. 4 and into the 72-inch Suction Main.

(3) One (1) Primary Cooler Tank T-345A, identified as CBTF0130, constructed in 1995, with vapors directed by a natural gas blanketing system CB3083 to Control Station No. 4 and into the 72-inch Suction Main.

(e) Control Station No. 5

(1) One (1) Sump of Circulating Liquor Ls-100E, identified as CBS40144, constructed in 1991, with vapors directed by a natural gas blanketing system CB3051 to Control Station No. 5 and into the 72-inch Suction Main.

(2) Three (3) Tar Storage Tanks T-301,T-302A, T-302B, identified as CBTA0146, CBTB0147 and CBTC0148, constructed in 1948, 1930 and 1930, respectively, with vapors directed by a natural gas blanketing system CB3051 to Control Station No. 5 and into the 72-inch Suction Main.

(3) Two (2) Storage Tanks T-7100, T7110 and T-7120, constructed and refurbished in 1997, with vapors directed by a natural gas blanketing system CB3051 to Control Station No. 5 and into the 72-inch Suction Main.

(4) Two (2) Oil/Tar Separator Tanks, T-7000 and T-7010, constructed in 1997, with vapors directed by a natural gas blanketing system CB3051 to Control Station No. 5 and into the 72-inch Suction Main.

(5) Two (2) Oil and Tar Receiver Tanks, T-7020 and T-7030, constructed in 1997, with vapors directed by a natural gas blanketing system CB3051 to Control Station No. 5 and into the 72-inch Suction Main.

(f) One (1) Surge Tank T-7800, constructed in 1997, with vapors directed to a nitrogen gas blanketing system.

(g) Distillation Sump Emission Control

One (1) Distillation Sump Emission Control System, identified as CBS80151, constructed in 1989, with vapors directed to a nitrogen gas blanketing system.

(h) Coke Oven Gas (COG) High Pressure Control System, constructed in 1991, contains instrumentation and control valves designed to limit the maximum pressure in the COG distribution system. Excess COG pressure is directed to and combusted in a bleeder flare with emissions exhausting to Stack CG6077.

(i) Equipment in Benzene Service consists of several hundred components: pumps, exhausters, valves, flanges and pressure relief devices in benzene service within the byproducts plant.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 General Provisions Relating to Emission Standards for Hazardous Air Pollutants (NESHAP) [326 IAC 14] [40 CFR Part 61 Subpart A]

The provisions of 40 CFR Part 61, Subpart A (General Provisions), which are incorporated by reference in 326 IAC 14, apply to the process vessels, tar storage tank, light oil sump, naphthalene processing, final coolers and cooler towers and equipment in benzene service

except when otherwise specified in 40 CFR Part 61, Subpart L, 40 CFR Part 61, Subpart V, and 40 CFR Part 61, Subpart FF.

D.3.2 National Emission Standard for Hazardous Air Pollutants (NESHAP)-Benzene Limitations from Coke Byproduct Recovery Plants [40 CFR 61 Subpart L] [326 IAC 14]

(a) Pursuant to 40 CFR 61.132, the Permittee shall:

(1) Enclose and seal all openings on each process vessel, tar storage tank, and tar intercepting sump.

(2) Duct gases from each process vessel, tar storage tank, and tar intercepting sump to the gas collection system, gas distribution system, or other enclosed point in the by product recovery process where the benzene in the gas will be recovered or destroyed. This control system shall be designed and operated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined by the methods specified in 40 CFR 61.245(c). This system can be designed as a closed, positive pressure, gas blanketing system.

(A) The Permittee may elect to install, operate, and maintain a pressure relief device, vacuum relief device, an access hatch, and a sampling port on each process vessel, tar storage tank, and tar intercepting sump. Each access hatch and sampling port must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

(B) The Permittee may elect to leave open to the atmosphere the portion of the liquid surface in each tar decanter necessary to permit operation of a sludge conveyor. If the Permittee elects to maintain an opening on part of the liquid surface of the tar decanter, the Permittee shall install, operate, and maintain a water leg seal on the tar decanter roof near the sludge discharge chute to ensure enclosure of the major portion of liquid surface not necessary or the operation of the sludge conveyor.

(3) Monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Method 21 (40 CFR part 60, appendix A) and procedures specified in 40 CFR 61.245(c), and shall visually inspect each source (including sealing materials) and the ductwork of the control system for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted on a semiannual basis and at any other time after the control system is repressurized with blanketing gas following removal of the cover or opening of the access hatch.

(A) If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Method 21, a leak is detected.

(B) If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

(C) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

(D) A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

(4) Conduct a maintenance inspection of the control system following the installation of control equipment used to meet the requirements of 40 CFR 61.132(a) on an annual basis for evidence of system abnormalities, such as blocked or plugged lines, sticking valves, plugged condensate traps, and other maintenance defects that could result in abnormal system operation. The Permittee shall make a first attempt at repair within 5 days, with repair within 15 days of detection.

(5) Comply with the requirements of 40 CFR 61.132(a) through (c) for each benzene storage tank, BTX storage tank, light oil storage tank, and excess ammonia liquor storage tank.

(b) Pursuant to 40 CFR 61.133 and 326 IAC 14-9, the Permittee of a light oil sump shall:

(1) Enclose and seal the liquid surface in the sump to form a closed system to contain the emissions.

(2) The Permittee may elect to install, operate, and maintain a vent on the light-oil sump cover. Each vent pipe must be equipped with a water leg seal, a pressure relief device, or vacuum relief device.

(3) The Permittee may elect to install, operate, and maintain an access hatch on each light-oil sump cover. Each access hatch must be equipped with a gasket and a cover, seal or lid that must be kept in a closed position at all times, unless in actual use.

(4) Replace the light-oil sump cover when removed for periodic maintenance with a seal at completion of the maintenance operation.

(5) Not vent steam or other gases from the by-product process to the light-oil sump.

(6) Monitor semiannually the connections and seals on each control system following the installation of control equipment to meet the requirements of 40 CFR 61.132(a) to determine if it is operating with no detectable emissions, using 40 CFR Part 60, Appendix A, Method 21, and the procedures specified in 40 CFR Part 61, Subpart V, Section 61.245(c) and 326 IAC 14-8-3(b). The Permittee also shall conduct on a semiannual basis a visual inspection of each source including sealing materials for evidence of visible defects such as gaps or tears.

(A) If an instrument reading indicates an organic chemical concentration of more than 500 ppm above a background concentration, as measured by 40 CFR Part 60, Appendix A, Method 21, a leak is detected.

(B) If visible defects such as gaps in sealing materials are observed during visual inspection, a leak is detected.

(C) A first attempt at repair of any leak or visible defect shall be made no later than five (5) calendar days after each leak is detected.

(D) When a leak is detected, it shall be repaired as soon as practicable, but not later than fifteen (15) calendar days after it is detected.

(c) Pursuant to 40 CFR 61.134, the Permittee of naphthalene processing, final coolers, and final-cooler cooling towers shall allow “zero” emissions from these facilities.

(d) Pursuant to 40 CFR 61.135 and 326 IAC 14-9-5, each Permittee of equipment in benzene service shall comply with the requirements of 40 CFR 61, Subpart V and 326 IAC 14-9-5, except as provided in 40 CFR 61.135.

(1) The provisions of 40 CFR 61, Subpart V, Sections 61.242-3 and 61.242-9, do not apply to 40 CFR 61.135 and 326 IAC 14-9-5.

(2) Each piece of equipment in benzene service to which 40 CFR 61.135 and 326 IAC 14-9-5 apply, shall be marked in such a manner that it can be distinguished readily from other pieces of equipment in benzene service.

(3) Each exhauster shall be monitored quarterly to detect leaks by the methods specified in 40 CFR 61, Subpart V, Section 61.245(b) and 326 IAC 14-8-3(a), except as provided in subsections 40 CFR 61.136(d), 40 CFR 61.135 (e) - (g), 326 IAC 14-9-5 (e), (f) and (g) and in 326 IAC 14-9-6(c).

(A) If an instrument reading of ten thousand (10,000) ppm or greater is measured, a leak is detected.

(B) When a leak is detected, it shall be repaired as soon as practicable, but no later than fifteen (15) calendar days after it is detected, except as provided in 40 CFR 61, Subpart V, Section 61.242-10(a) and (b). A first attempt at repair shall be made no later than five (5) calendar days after each leak is detected.

(4) Each exhauster equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluids to the atmosphere is exempt from the requirements of subsection 40 CFR 61.135 (d) and 326 IAC 14-9-5 (d) provided the following requirements are met:

(A) Each exhauster seal system is:

(i) operated with the barrier fluid at a pressure that is greater than the exhauster stuffing box pressure; or

(ii) equipped with a barrier fluid system that is connected by a closed vent system to a control device that complies with the requirements of 40 CFR 61, Subpart V, Section 61.242-11; or

(iii) equipped with a system that purges the barrier fluid into a process stream with zero (0) benzene emissions to the atmosphere.

(B) The barrier fluid is not in benzene service.

(C) Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

(D) Each sensor as described in 40 CFR 61.135(e)(3) shall be checked daily or shall be equipped with an audible alarm.

(E) The Permittee shall determine, based on design consideration and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(F) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under 40 CFR 61.135(e)(4)(ii), a leak is detected.

(G) When a leak is detected, it shall be repaired as soon as practicable, but not later than fifteen (15) calendar days after it is detected, except as provided in 40 CFR 61, Subpart V, Section 61.242-10.

(H) A first attempt at repair shall be made no later than five (5) calendar days after each leak is detected.

(5) An exhauster is exempt from the requirements of subsection 40 CFR 61.135(d) if it is equipped with a closed vent system capable of capturing and transporting any leakage from the seals to a control device that complies with the requirements of 40 CFR 61, Subpart V, Section 61.242-11 except as provided in 40 CFR 61.135 (g).

(6) Any exhauster that is designated, as described in 40 CFR 61, Subpart V, Section 61.246(e) and in 326 IAC 14-8-4(d), (e), (f), and (g) for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 61.135(d) if,

(A) The exhauster is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in 40 CFR 61, Subpart V, Section 61.245(c) and in 326 IAC 14-8-3(b); and

(B) The exhauster is tested for compliance with 40 CFR 61.135(g)(1) initially upon designation, annually, and at other times requested by the commissioner.

(7) Any exhauster that is in vacuum service is excluded from the requirements of 40 CFR 61, Subpart L and 326 IAC 14-9-5, if it is identified as required in 40 CFR 61, Subpart V, Section 61.246(e)(5) and 326 IAC 14-8-4(d).

D.3.3 National Emission Standard for Hazardous Air Pollutants (NESHAP) - Coke Byproduct Recovery Plants Equipment Leaks [326 IAC 14] [40 CFR 61 Subpart V]

Pursuant to 40 CFR 61 Subpart V, and 326 IAC 14, the Permittee shall control the HAPs emitted from equipment leaks in accordance with 40 CFR 61, Subpart V - National Emission Standard for Equipment Leaks (Fugitive Emission Sources), Sections 61.242-1 through 61.242-11, where applicable. The provisions apply to equipment in benzene service at the coke byproducts plant.

(a) Pursuant to 40 CFR 61.242-1(d), each piece of equipment to subject to the requirements of 40 CFR 61 Subpart V shall be marked in such a manner that it can be distinguished readily from other pieces of equipment.

(b) Pursuant to 40 CFR 242-1(e), equipment in vacuum service is excluded from the requirements of 40 CFR 61.242-2 through 61.242-11, if it is identified as required in 40 CFR 61.246(e)(5).

(c) Pursuant to 40 CFR 61.242-4 (Standards: Pressure relief devices in gas/vapor service), the standards listed below apply to pressure relief devices in gas/vapor service:

(1) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an

instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).

(2) The following requirements apply regarding pressure releases:

(A) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 61.242-10 and,

(B) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions ads indicated by an instrument reading of less than 500 ppm above background as measured by the method in 40 CFR 91.245(c).

(3) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in 40 CFR 61.242-11 is exempt from the requirements of 40 CFR 61.242-4 (a) and (b).

(4) The following applies regarding pressure release devices with rupture disks:

(A) Any pressure relief device that is equipped with a rupture disk upstream of a pressure relief device is exempted from the requirement of 40 CFR 61.242-4 (a) and (b) provided the Permittee complies with the requirements in 40 CFR 61.242-4(d)(2).

(B) A new rupture disk shall be installed upstream of the pressure relief device as soon as practicable , but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 61.242-10.

(d) Pursuant to 40 CFR 61.242-5 (Standards: Sampling connecting systems), the standards listed below apply to sampling connecting systems:

(1) Each sampling connection system shall be equipped with a closed-purge system or closed vent system, except as provided in 40 CFR 242-1(c).

(2) Each closed-purge system or closed-vent system as required in paragraph D.3.3(c)(1) shall do the following:

(A) Return the purged process fluid to the process line, or

(B) Collect and recycle the purged process fluid or,

(C) Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements 40 CFR 61.242-11.

(3) In-situ sampling systems are exempt from the requirements of items (1) and (2) above.

(e) Pursuant to 40 CFR 61.242-6 (Standards: Open-ended valves or lines), the standards listed below apply to open-ended valves or lines:

(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in paragraph (d)(4) of this condition.

(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

(3) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

(4) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (d)(1) of this condition at all other times.

(f) Pursuant to 40 CFR 61.242-9 (Standards: Surge control vessels and bottoms receivers), each surge control vessels and bottoms receiver that is not routed back to the process, located at existing sources with a capacity less than or equal to 75 cubic meters and less than 151 cubic meters and a vapor pressure greater than or equal to 13.1 KPa; or with a capacity less than or equal to 151 cubic meters and a vapor pressure greater than or equal to 5.2 KPa shall be equipped with a closed-vent system capable of capturing and transporting any leakage from the vessel back to the process or to a control device as described in 40 CFR 61.242-11.

(g) Pursuant to 40 CFR 61.242-11 (Standards: Closed-vent systems and control devices), the Permittee shall comply with the provisions of this paragraph the closed-vent systems and control devices.

(1) Vapor recovery systems shall be designed and operated to recover the organic vapors vented to them with an efficiency of 95 percent or greater or to an exit concentration of 20 parts per million by volume, whichever is less stringent.

(2) Closed-vent systems shall be designed for and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and by visual inspections, as determined by the methods specified in 40 CFR 61.245(c).

(3) The closed-vent system and control devices shall be operated at all times when emissions may be vented to them.

D.3.4 National Emission Standard for Hazardous Air Pollutants (NESHAP) - Benzene Waste Operations [40 CFR Part 61, Subpart FF] [326 IAC 14]

Pursuant to 40 CFR 61.342(a), the Permittee of a coke byproduct recovery plant at which the total annual benzene quantity from facility waste is less than 10 megagrams per year (Mg/yr) (11 ton/yr) shall be exempt from the requirements of 40 CFR 61.342(b) and (c).

(a) The total annual benzene quantity from facility waste is the sum of the annual benzene quantity for each waste stream at the facility that has a flow weighted annual average water content greater than 10 percent or that is mixed with water, or other wastes, at any time and the mixture has an annual average water content greater than 10 percent.

(b) The benzene quantity in a waste stream is to be counted only once without multiple counting if other waste streams are mixed with or generated from the original waste stream.

(c) Wastes that are exempted from control under 40 CFR 61.342(c)(2) and 61.342(c)(3) are included in the calculation of the total annual benzene quantity if they have an annual average water content greater than 10 percent, or if they are mixed with water or other wastes at any time and the mixture has an annual average water content greater than 10 percent.

(d) The benzene in a material subject to this subpart that is sold is included in the calculation of the total annual benzene quantity if the material has an annual average water content greater than 10 percent.

(e) Benzene in wastes generated by remediation activities conducted at the facility, such as the excavation of contaminated soil, pumping and treatment of groundwater and the recovery of product from soil or groundwater, are not included in the calculation of total annual benzene quantity for that facility.

(f) The total annual benzene quantity is determined based upon the quantity of benzene in the waste before any waste treatment occurs to remove the benzene except as specified in 40 CFR 61.355(c)(1)(i) (A) through (C).

D.3.5 Particulate Emissions Limitations [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), the Permittee shall not allow or permit discharge to the atmosphere any gases which contain particulate matter in excess of 0.03 grain per dry standard cubic foot (dscf) from the Coke Oven Gas High Pressure Control System Stack CG6077.

D.3.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and any associated control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.3.7 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Coke By-product Recovery Plant: Benzene Compliance Requirements [40 CFR 61, Subpart L][326 IAC 14]

(a) Pursuant to 40 CFR 61.136(b), the Permittee shall determine compliance with 40 CFR 61.132 through 61.135 by reviewing records, performance test results, inspections or any combination thereof, using the methods and procedures specified in 40 CFR 61.137.

(b) Pursuant to 40 CFR 61.137(a), the Permittee subject to the provisions of 40 CFR 61 Subpart L shall comply with the requirements in 40 CFR 61.245 of 40 CFR 61, Subpart V.

(c) Pursuant to 40 CFR 61.137(b), to determine whether or not a piece of equipment is in benzene service, the methods in 40 CFR 61.245(d) shall be used, except that, for exhausters , the percent benzene shall be 1 percent by weight rather than the ten percent by weight described in 40 CFR 61.245(d).

D.3.8 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Coke By-product Recovery Plant: Monitoring Procedures for Equipment Leaks [40 CFR 61, Subpart V] [326 IAC 14]

Pursuant to 40 CFR 61, Subpart V, the Permittee must conduct monitoring in accordance with the paragraphs listed below to comply with leak detection requirements:

(a) Pursuant to 40 CFR 61.242-2, the following standards apply to pumps:

(1) Each pump shall be monitored monthly to detect leaks by the methods specified in 40 CFR 61.245(b), except as provided in 40 CFR 242-2(d)–(f).

(2) Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

(3) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(4) If there are indications of liquids dripping from the pump seal, a leak is detected.

(5) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after each leak is detected, except as provided in 40 CFR 61.242-10 and paragraph (e) of this condition.

(6) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(7) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of item (2) of this condition and 40 CFR 61.242-2(d), provided that each pump is visually inspected as often as practical and at least monthly.

(b) Pursuant to 40 CFR 61.242-4(b)(2), no later than 5 calendar days after a pressure release, the pressure relief device in gas/vapor service shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).

(c) Pursuant to 40 CFR 61.242-7, the standards listed below apply to valves:

(1) Each valve shall be monitored monthly to detect leaks by the method specified in 40 CFR 61.245(b), except as provided in 40 CFR 61.242-7(f), (g) and (h), 40 CFR 61.243-1 or 40 CFR 61.243-2 and 40 CFR 242-1(c).

(2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(3) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

(4) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

(5) When a leak is detected it shall be repaired as soon as practicable, but not later than 15 calendar days after the leak is detected, except as provided in 40 CFR 61.242-10 and paragraph (e) of this condition.

(6) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(7) First attempts at repair include, but are not limited to, the following best practices where practicable:

(A) Tightening of bonnet bolts;

(B) Replacement of bonnet bolts;

(C) Tightening of packing gland nuts; and,

(D) Injection of lubricant into lubricated packing.

(8) Any valve that is designated, as described in 40 CFR 61.246(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 61.242-7(a) if the valve:

(A) Has no external actuating mechanism in contact with the process fluid;

(B) Is operated with emissions less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c), and

(C) Is tested for compliance with item (8)(B) of this condition initially upon designation, annually, and at other times requested by the IDEM.

(9) Any valve that is designated, as described in 40 CFR 61.246(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:

(A) The Permittee of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to am immediate danger as a consequence of complying with 40 CFR 61.242-7(a) and

(B) The Permittee of the valve has a written plan that requires monitoring of the valve as frequent as practicable during safe-to-monitor times.

(10) Any valve that designated as described in 40 CFR 61.246(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:

(A) The Permittee of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface,

(B) The process unit within which the valve is located is an existing process unit and,

(C) The Permittee of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

(d) Pursuant to 40 CFR 61.242-8, pressure relief devices in liquid service and flanges and other connectors shall be monitored within 5 days by the method specified in 40 CFR 61.245(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.

(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(2) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10 and paragraph (e) of this condition.

(3) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(4) First attempts at repair include, but are not limited to, the best practices described under 40 CFR 61.242-7(e).

(e) Pursuant to 40 CFR 61.242-10 (Standards: Delay of Repair), the standards listed below apply to delay of repair of equipment:

(1) Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.

(2) Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the process that does not remain in benzene service.

(3) Delay of repair for valves will be allowed if:

(A) The Permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair; and

(B) When repair procedures are affected, the purged material is collected and destroyed or recovered in the control device complying with 40 CFR 61.242-11.

(4) Delay of repair for pumps will be allowed if:

(A) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system; and

(B) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

(5) Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

(f) Pursuant to 40 CFR 61.242-11(e), the Permittee shall monitor control devices to ensure they are operated and maintained in conformance with its design.

(g) Pursuant to 40 CFR 61.242-11(f), the monitoring requirements listed below apply to closed-vent systems.

(1) Closed-vent systems shall be monitored to determine compliance with 40 CFR 61.242-11 initially in accordance with 40 CFR 61.05, annually, and at other times requested by the US EPA or IDEM, OAQ.

(2) Leaks, as indicated by an instrument reading greater than 500 ppm and visual inspections, shall be repaired as soon as practicable, but not later than 15 calendar days after the leak is detected.

(3) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

D.3.9 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Coke By-product Recovery Plant Leak Detection Testing Requirements [40 CFR 61, Subpart V] [326 IAC 14]

(a) Monitoring required under 40 CFR 61, Subpart V and 40 CFR 61.135 of Subpart L shall comply with the following requirements in accordance with 40 CFR 61.245:

(1) Monitoring shall comply with reference Method 21 of Appendix A of 40 CFR Part 60 procedures and performance criteria.

(A) The detection instrumentation shall meet the Performance criteria of Method 21.

(B) Instrument shall be calibrated before use on each day of its use;

(C) Calibration gases shall be;

(i) Zero air (less than 10 ppm of hydrocarbon in air); and

(ii) A mixture of methane or n–hexane and air at a concentration of approximately, but less than 10,000 ppm methane or n-hexane.

(D) The instrument probe shall be traversed around all potential leak interfacings.

(E) When equipment is tested for compliance with or monitored for no detectable emissions, the background level shall be determined in accordance with Method 21. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(2) Each piece of equipment within a process unit that can conceivably contain equipment in VHAP service is presumed to be in VHAP service unless the Permittee demonstrates that the piece of equipment is not in VHAP service in accordance with 40 CFR 61.245(d)(1) or (2). For a piece of equipment to be considered not in VHAP service, it must be determined that the percent VHAP content can be reasonable expected never to exceed 10 percent by weight.

(3) Samples used to determine the percent VHAP content shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

(b) Pursuant to 40 CFR 61.242-1(b), compliance with 40 CFR 61, Subpart V, will be determined by a review of records, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 61.245.

D.3.10 National Emission Standards for Hazardous Air Pollutants (NESHAP)- Benzene Waste Operations Methods, Procedures and Compliance [40 CFR 61, Subpart FF] [326 IAC 14]

Pursuant to 40 CFR 61.355, the Permittee shall determine the total annual benzene quantity from facility waste by the following procedure:

(a) For each waste stream subject to 40 CFR 61, Subpart FF with a flow weighted annual average water content greater than 10 percent water, on a volume basis as total water, or is mixed with water or other wastes at any time and the resulting mixture has an annual average water content greater than 10 percent as specified in 40 CFR 61.342(a), the Permittee shall:

(1) Determine the annual waste quantity for each waste stream using the procedures specified in 40 CFR 61.355.

(2) Determine the flow weighted annual average benzene concentration for each waste stream using the procedures specified in 40 CFR 61.355.

(3) Calculate the annual benzene quantity for each waste stream by multiplying the annual waste quantity of the waste stream times the flow weighted annual average benzene concentration.

(b) Total annual benzene quantity from facility waste is calculated by adding together the annual benzene quantity for each waste stream generated during the year and the annual benzene quantity for each process unit turnaround waste annualized according to 40 CFR 61.355.

(c) If the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr), then the Permittee shall comply with the requirements of 40 CFR 61.342 (c), (d), or (e).

(d) If the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr), then the Permittee shall:

(1) Comply with the record keeping requirements of 40 CFR 61.356 and reporting requirements of 40 CFR 61.357 of this subpart; and

(2) Repeat the determination of total annual benzene quantity from facility waste at least once per year and whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr (11 ton/yr) or more.

(e) If the total annual benzene quantity from facility waste is less than 1 Mg/yr (1.1 ton/yr) the Permittee shall:

(1) Comply with the record keeping requirements of 40 CFR 61.356 and reporting requirements of 40 CFR 61.357 of this subpart, and

(2) Repeat the determination of total annual benzene quantity from facility waste whenever there is a change in the process generating the waste that could cause the total annual benzene quantity facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more.

(f) The determination of annual waste quantity for wastes at coke by product plants subject to and complying with the control requirements of 40 CFR 61.132, 61.133, 61.134, or 61.139 of Subpart L shall be made at the location that the waste stream exits the process unit component or waste management unit controlled by that subpart or at the exit of the ammonia still, provided that the following conditions are met:

(1) The transfer of wastes between units complying with the control requirements of 40 CFR 61 Subpart L, process units, and the ammonia still is made through hard piping or other enclosed system.

(2) The ammonia still meets the definition of a sour water stripper in 40 CFR 61.341.

(g) Pursuant to 40 CFR 61.355(b), the calculation required to determine the total annual benzene quantity at the point of waste generation shall be determined by one of the following methods:

(1) Select the highest annual quantity of waste managed from historical records representing the most recent 5 years of operation or, if the facility has been in service for less than 5 years but at least 1 year, from historical records representing the total operating life of the facility;

(2) Use the maximum design capacity of the waste management unit; or

(3) Use measurements that are representative of maximum waste generation rates.

(h) Pursuant to 40 CFR 61.342(g), compliance with 40 CFR 61, Subpart FF will be determined by review of facility records and results from tests and inspections using methods and procedures specified in 40 CFR 61.355.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19][40 CFR 61]

D.3.11 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Coke By-product Recovery Plant –Benzene Record Keeping Requirements [40 CFR 61 Subpart L] [326 IAC 14]

Pursuant to 40 CFR 61.138, the Permittee shall comply with the following record keeping requirements:

(a) The following information pertaining to the design of control equipment installed to comply with 40 CFR 61.132 through 61.134 shall be recorded and kept in a readily accessible location:

(1) Detailed schematics, design specifications, and piping and instrumentation diagrams.

(2) The dates and descriptions of any changes in the design specifications.

(b) The following information pertaining to sources subject to 40 CFR 61.132 and sources subject to 40 CFR 61.133 shall be recorded and maintained for 2 years following each semiannual (and other) inspection and each annual maintenance inspection:

(1) The date of the inspection and the name of the inspector.

(2) A brief description of each visible defect in the source or control equipment and the method and date of repair of the defect.

(3) The presence of a leak, as measured using the method described in 40 CFR 61.245(c). The record shall include the date of attempted and actual repair and method of repair of leak.

(4) A brief description of any system abnormalities found during the annual maintenance inspection, the repairs made and the date of attempted repair, and the date of actual repair.

D.3.12 National Emission Standards for Hazardous Air Pollutants (NESHAP)- Coke Byproduct Recovery Plant Record Keeping Requirements for- Equipment Leaks [40 CFR 61, Subpart V] [326 IAC 14]

Pursuant to 40 CFR 61.246, the Permittee shall comply with the following record keeping requirements:

(a) The Permittee may comply with the record keeping requirements for the process units in one record keeping system if the system identifies each record by each process unit.

(b) When each leak is detected as specified in 40 CFR 61.242-2, 242-7, 242-8 and 61.135 the following requirements apply:

(1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 61.242-7(c) and no leak has been detected during those 2 months.

(3) The identification on equipment, except on a valve, may be removed after it has been repaired.

(c) When each leak is detected as specified in 40 CFR 61, Sections 242-2, 242-7, and 242-8 the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

(1) The instrument and operator identification numbers and the equipment identification number;

(2) The date the leak was detected and the dates of each attempt to repair the leak;

(3) Repair methods applied in each attempt to repair the leak;

(4) “Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 61.245(a) after each repair attempt is equal to or greater than 10,000 ppm.

(5) “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;

(6) The signature of the Permittee (or designate) whose decision it was that the repair could not be effected without a process shutdown;

(7) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days;

(8) Dates of process unit shutdowns that occur while the equipment is unrepaired; and

(9) The date of successful repair of the leak.

(d) The following information pertaining to the design requirements for the closed-vent system and control devices shall be recorded and kept in a readily accessible location:

(1) Detailed schematics, design specifications, and piping and instrumentation diagrams;

(2) The dates and descriptions of any changes in the design specifications;

(3) A description of the parameter or parameters monitored, as required in 40 CFR 61.242-11(e), to ensure that the control devices are operated and maintained in conformance with its design and an explanation of why that parameter (or parameters) was selected for the monitoring;

(4) Periods when the closed-vent system and control devices are not operated as designed; and

(5) Dates of startups and shutdowns of the closed-vent system and control devices.

(e) The following information pertaining to all equipment to which a standard applies shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for equipment (except welded fittings) subject to the requirements of 40 CFR 61, Subpart V;

(2) A list of identification numbers for equipment that the Permittee elects to designate for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background. The designation of this equipment for no detectable emissions shall be signed by the Permittee;

(3) A list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 61.242-4(a); and

(4) The following information for each compliance test required in 40 CFR 61.242-4:

(A) The dates of each compliance test.

(B) The background level measured during each compliance test; and

(C) The maximum instrument reading measured at the equipment during each compliance test.

(f) The following information pertaining to valves that are designated as unsafe to monitor or difficult to monitor shall be recorded in a log that is kept in a readily accessible location:

(1) A list of the identification numbers for the valves.

(2) An explanation for each valve, stating why the valve is unsafe or difficult to monitor.

(3) The plan for monitoring each valve that is unsafe to monitor.

(4) The planned schedule for monitoring each valve that is difficult to monitor.

(g) Information and data used to demonstrate that a piece of equipment is not in VHAP service shall be recorded in a log that is kept in a readily accessible location.

D.3.13 National Emission Standards for Hazardous Air Pollutants (NESHAP) -Benzene Waste Operations -Record Keeping Requirements [40 CFR 61, Subpart FF] [326 IAC 14]

(a) Pursuant to 40 CFR 61.356(b), the Permittee shall maintain records that identify each waste stream at the facility subject to 40 CFR 61, Subpart FF, and indicate whether or not the waste stream is controlled for benzene emissions in accordance with 40 CFR 61, Subpart FF.

(b) Pursuant to 40 CFR 61.356(b)(1), for each waste stream not controlled for benzene emissions in accordance with 40 CFR 61, Subpart FF, the Permittee shall keep records that include all test results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste stream is a process wastewater stream, annual

waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

(c) Pursuant to 40 CFR 61.356(a), the Permittee shall maintain each record in a readily accessible location at the facility site for a period not less than two years from the date the information is recorded, unless otherwise specified. Records shall also be kept in accordance with Section C - General Record Keeping Requirements.

D.3.14 National Emission Standards for Hazardous Air Pollutants (NESHAP) -Coke Byproduct Recovery Plant - Benzene Reporting Requirements [40 CFR 61 Subpart L][326 IAC 14]

Pursuant to 40 CFR 61.138, the Permittee shall comply with the following reporting requirements:

(a) A report shall be submitted to IDEM, OAQ semiannually starting 6 months after the initial reports required in 40 CFR 61.138(e) and 40 CFR 61.10, which includes the following information:

(1) For sources subject to 40 CFR 61.132 and sources subject to 40 CFR 61.133,

(A) A brief description of any visible defect in the source or ductwork,

(B) The number of leaks detected and repaired, and

(C) A brief description of any system abnormalities found during each annual maintenance inspection that occurred in the reporting period and the repairs made.

(2) For equipment in benzene service subject to 40 CFR 61.135(a), information required by 40 CFR 61.247(b).

(3) For each exhauster subject to 40 CFR 61.135 for each quarter during the semiannual reporting period,

(A) The number of exhausters for which leaks were detected as described in 40 CFR 61.135 (d) and (e)(5),

(B) The number of exhausters for which leaks were repaired as required in 40 CFR 61.135 (d) and (e)(6),

(C) The results of performance tests to determine compliance with 40 CFR 61.135(g) conducted within the semiannual reporting period.

(4) A statement signed by the Permittee stating whether all provisions of 40 CFR Part 61, subpart L, have been fulfilled during the semiannual reporting period.

(5) Revisions to items reported according to 40 CFR 61.139(e), if changes have occurred since the initial report or subsequent revisions to the initial report.

NOTE: Compliance with the requirements of 40 CFR 61.10(c) is not required for revisions documented under this paragraph.

(b) In the first report submitted as required in 40 CFR 61.138(e), the report shall include a reporting schedule stating the months that semiannual reports shall be submitted. Subsequent reports shall be submitted according to that schedule unless a revised schedule has been submitted in a previous semiannual report.

(c) A Permittee electing to comply with the provisions of 40 CFR 61.243–1 and 61.243–2 shall notify IDEM, OAQ of the alternative standard selected 90 days before implementing either of the provisions.

(d) An application for approval of construction or modification, as required under 40 CFR 61.05(a) and 61.07, will not be required for sources subject to 40 CFR 61.135 if:

(1) The new source complies with 40 CFR 61.135, and

(2) In the next semiannual report required by 40 CFR 61.138(f), the information described in 40 CFR 61.138(e)(4) is reported.

D.3.15 National Emission Standards for Hazardous Air Pollutants (NESHAP) Coke Byproduct Recovery Plant - Equipment Leaks Reporting Requirements [40 CFR 61, Subpart V] [326 IAC 14]

Pursuant to 40 CFR 61.247, the Permittee shall comply with the reporting requirements of this paragraph. A report shall be submitted to the US EPA and IDEM, OAQ semi-annually that includes the following information:

(a) Process unit identification;

(b) For each month during the semi-annual reporting period:

(1) Number of valves for which leaks were detected as described in 40 CFR 61.242-7(b) and condition D.3.8(c)(2);

(2) Number of valves for which leaks were not repaired as required in 40 CFR 61.242-7(d) and condition D.3.8(c)(5);

(3) Number of pumps for which leaks were detected as described in 40 CFR 61.242-2(b) and (d)(6) and condition D.3.8(a)(3) and (4);

(4) Number of pumps for which leaks were not repaired as required in 40 CFR 61.242-2(c) and (d)(6) and condition D.3.8(a)(5) and (6);

(5) The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible;

(6) Dates of process unit shutdowns which occurred within the semi-annual reporting period; and

(7) Revisions to items reported according to the initial report required by 40 CFR 61.247(a)(1) if changes have occurred since the initial report or subsequent revisions to the initial report.

NOTE: Compliance with the requirements of 40 CFR 61.10 is not required for revisions documented under this condition.

(8) The results of all performance tests and monitoring to determine compliance with no detectable emissions conducted within the semi-annual reporting period.

D.3.16 National Emission Standards for Hazardous Air Pollutants (NESHAP) Benzene Waste Operations Reporting Requirements [40 CFR 61, Subpart FF] [326 IAC 14]

(a) Pursuant to 40 CFR 61.357(c), the Permittee shall submit to the US EPA and IDEM, OAQ, the following information if the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 tons/yr), but is equal to or greater than 1 Mg/yr (1.1 tons/yr):

(1) A report annually containing information to update the report originally submitted pursuant to 40 CFR 61.357 (a)(1) through (a)(3); and

(2) A report whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr or more.

(3) If the information in the annual report has not changed from the following year as specified in 40 CFR 61.357(c) a statement to that effect.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: One (1) coke oven gas (COG) desulfurization facility

(a) One (1) amine unit, constructed in 1997, removes hydrogen sulfide and other organic sulfur compounds from the coke oven gas (COG) stream.

(b) One (1) reflux unit, constructed in 1997, recycles ammonia and acid gas into the COG stream.

(c) One (1) hydrogen cyanide (HCN) destruction unit, constructed in 1997 converts HCN in the acid gas stream to ammonia to minimize corrosion to the Sulfur Recovery Unit.

(d) One (1) sulfur recovery unit, constructed in 1997, converts sulfur compounds in the acid gas stream to elemental sulfur. This sulfur is sold as a product.

(e) One (1) incineration unit, constructed in 1997, converts remaining sulfur compounds not removed by the sulfur recovery unit into sulfur dioxide.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38]

(a) Pursuant to 326 IAC 6.8-2-38, the PM_{10} emissions from the Coke Plant Desulfurization Facility Tail Gas Incinerator shall not exceed 0.13 pound per hour.

(b) Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emissions limitations apply to one (1) stack serving the multiple units specified when the facility description notes stack serving, and to each stack of multiple stacks serving multiple facilities when the facility description notes each stack serving.

D.4.2 Sulfur Dioxide (SO_2) Emissions Limitations [326 IAC 7-4.1-20]

Pursuant to 326 IAC 7-4.1-20 the sulfur dioxide emissions from the desulfurization plant shall be as follows:

(a) Pursuant to 326 IAC 7-4.1-20(a)(1)(H), when the coke oven gas desulfurization facility is not operating, sulfur dioxide from the Coke Oven Gas Tail Gas Incinerator stack shall not exceed 22.0 pounds per hour.

(b) Pursuant to 326 IAC 7-4.1-20(b)(8), when the coke oven gas desulfurization facility is operating sulfur dioxide emissions from the Coke Oven Gas Tail Gas Incinerator stack shall not exceed 295 pounds per hour.

(c) Pursuant to 326 IAC 7-4.1-20(c)(4), the Coke Oven Gas Desulfurization Plant's down time shall not exceed nine hundred and fifty (950) hours per year.

D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and associated control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.4 Record Keeping Requirements

(a) To document the compliance status with Condition D.4.2, the Permittee shall maintain records of the downtime hours of the Coke Oven Gas Desulfurization Plant.

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.4.5 Reporting Requirements

A quarterly summery report to document compliance with Condition D.4.2 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - Sulfur Dioxide SO_2 Reporting Requirements (Entire Source) contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: One (1) No. 2 Coke Plant Boiler House

(a) Two (2) Boilers, Nos. 1 and 2, identified as CSS10155 and CSS20156, constructed prior to 1970, with a maximum heat input capacity of 160 MMBtu per hour each, exhausting to stack CS6061. These boilers are equipped to combust natural gas.

(b) One (1) Boiler, No. 3, identified as CSS30157, constructed in 1943, with a maximum heat input capacity of 160 MMBtu per hour, exhausting to stack CS6062. This boiler is equipped to combust natural gas and coke oven gas.

(c) Two (2) Boilers, Nos. 4 and 5, identified as CSS40158 and CSS50159, constructed prior to 1955, with a maximum heat input of 170 MMBtu per hour each, exhausting to stack CS6063. These boilers are equipped to combust natural gas and coke oven gas.

(d) One (1) Boiler No. 6, identified as CSS60160, constructed in 1955, with a maximum heat input capacity of 170 MMBtu per hour, exhausting to stack CS6064. This boiler is equipped to combust natural gas and coke oven gas.

(e) One (1) Boiler, No. 7, identified as CS70161, constructed in 1976, with a maximum heat input capacity of 170 MMBtu per hour, exhausting to stack CS6065. This boiler is equipped to combust natural gas and coke oven gas.

(f) One (1) Boiler, No. 8, identified as CSS80162, constructed in 1981, with a maximum heat input capacity of 249 MMBtu per hour, exhausting to stack CS6066. This boiler is equipped to combust natural gas and coke oven gas.

(g) One (1) natural gas fired boiler at the coke plant boiler house, identified as the temporary rental boiler CSS80163, constructed in 2004 with a maximum heat input capacity of 235 MMBtu/hr and equipped with a low NO_X burner, exhausting to the existing stack CS6066.

(h) Two (2) boilers at the coke plant boiler house, identified as Boilers No. 9 CSS80164 and No. 10 CSS 80165, constructed in 2004, each with a maximum heat input capacity of 235 MMBtu/hr, exhausting to stacks CS6067 and CS6068, respectively. These boilers are equipped to burn natural gas and coke oven gas.

(i) One (1) lime storage silo with a maximum capacity of 20 tons per hour and emissions controlled by a baghouse LRS-1, constructed in 2001, exhausting inside the building.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38] [326 IAC 6.8-1-2(b)]

Pursuant to 326 IAC 6.8-2-38 the PM_{10} emissions from the Boilers Nos. 1 and 2, CSS10155 and CSS20156, Boiler No. 3, CSS60157, Boiler No. 4, CSS40158, Boiler No. 5, CSS50159, Boiler No. 6, CSS60160, Boiler No. 7, CSS70161 and Boiler No. 8, CSS80162 shall comply with the following:

(a) The PM_{10} emissions from the Coke Plant Boiler House Boilers Nos. 1 and 2 stacks CS6060 and CS6061 shall not exceed 0.003 pounds per MMBtu heat input each and a total of 0.75 pound per hour.

(b) The PM_{10} emissions from the Coke Plant Boiler House Boiler No. 3 stack CS6062 shall not exceed 0.012 pound per MMBtu of heat input and 1.8 pounds per hour.

(c) The PM_{10} emissions from the Coke Plant Boiler House Boilers No. 4 and No. 5 stack CS6063 shall not exceed 0.012 pound per MMBtu of heat input each and a total of 3.9 pounds per hour.

(d) The PM_{10} emissions from the Coke Plant Boiler House Boiler No. 6 stack CS6064 shall not exceed 0.012 pound per MMBtu of heat input and 2.0 pounds per hour.

(e) The PM_{10} emissions from the Coke Plant Boiler House Boiler No. 7 Stack CS6065 shall not exceed 0.012 pound per MMBtu of heat input and 1.9 pounds per hour.

(f) The PM_{10} emissions from the Coke Plant Boiler House Boiler No. 8 Stack CS6066 shall not exceed 0.012 pound per MMBtu of heat input and 2.9 pounds per hour.

(g) The PM_{10} emissions from the Coke Plant Boiler House Lime Storage Silo Baghouse LRS-1 shall not exceed 0.030 grain per dry standard cubic foot and 0.28 pound per hour.

(h) Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emissions limitations apply to one (1) stack serving the multiple units specified when the facility description notes stack serving, and to each stack of multiple stacks serving multiple facilities when the facility description notes each stack serving.

(i) Pursuant to Significant Source Modification 089-19678-00121, issued October 29, 2004 and 326 IAC 6.8-1-2(b) (Particulate Matter Limitations for Lake County), particulate matter (PM) from each of the boilers No. 9, No. 10 and the temporary rental boiler shall not exceed 0.01 grains per dry standard cubic foot (gr/dscf) of exhaust air.

D.5.2 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20]

Pursuant to 326 IAC 7-4-1-20, the SO_2 emissions from the Boilers: Boiler No. 1 CSS10155, Boiler No. 2 CSS20156, Boiler No. 3 Stack CS6062, Boiler No. 4 and 5 Stack CS6063, Boiler No. 6 Stack CS6064, Boiler No. 7 Stack CS6065 and Boiler No. 8 Stack CS6066 shall comply with the following limitations:

(a) Pursuant to 326 IAC 7-4.1-20(a)(1)(C), (a)(2)(B) and (a)(2)(C), when the coke oven gas desulfurization facility is not operating during the following periods,

Months	Boilers	Emission Limit (lbs/MMBtu)	Emission Limit (lbs/hr)
Jan - Dec	Boiler No. 8	1.27	316.2
Jan - Dec	Boiler No. 9	1.27	298.45
Jan - Dec	Boiler No. 10	1.27	298.45
Jan - Apr	Boiler Nos. 4 & 5.	0.444	150.0 total
May - Oct	Boiler Nos. 4 & 5.	0.385	130.0 total
Nov - Dec	Boiler Nos. 4 & 5.	0.000	0.0 total
Jan - Apr	Boiler No. 6	1.27	214.6
May - Oct	Boiler No. 6	1.27	214.6
Nov - Dec	Boiler No. 6	1.18	200.0

(b) Pursuant to 326 IAC 7-4.1-20(b)(3), when the coke oven gas desulfurization facility is operating.

Boilers	Emission Limit (lbs/MMBtu)	Emission Limit (lbs/hr)
Boiler No. 3	0.260	40.6
Boilers Nos. 4 and 5	0.260	87.9 total
Boiler No. 6	0.260	44.0
Boiler No. 7	0.260	42.1
Boiler No. 8	0.260	64.7
Boiler No. 9	0.260	61.10
Boiler No. 10	0.260	61.10

D.5.3 Nonattainment NSR Minor Limits [326 IAC 2-1.1-5]

Pursuant to Significant Source Modification 089-19678-00121, issued October 29, 2004 and in order to make the requirements of 326 IAC 2-1.1-5 Nonattainment NSR not applicable, the Permittee shall comply with the following:

(a) The NO_X emissions from each boiler No. 1 through 8 shall not exceed 280 pounds per million cubic feet (MMCF) of natural gas. (This is the NO_X emission factor in AP-42, Table 1.4-1 for uncontrolled boilers.)

(b) The NO_X emissions from the temporary rental boiler shall not exceed 36.0 pounds per million cubic feet (MMCF) for natural gas,

(c) The NO_X emissions from each of the boilers No. 9 and No. 10 shall not exceed 129 pounds per million cubic feet (MMCF) of natural gas.

(d) The total NO_X emissions from boilers No. 1 through No. 10 and the temporary rental boiler at the coke plant boiler house (CPBH) shall be limited to less than 64.6 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The monthly NO_X emissions shall be calculated using the following equation:

NO_X Emissions (tons/month) = (280 X + 36 Y + 129 Z) / 2,000

Where:

X = total monthly natural gas usage in boilers No. 1 through No. 8 (MMCF/month)
Y = monthly natural gas usage in the temporary rental boiler (MMCF/month)
Z = total monthly natural gas usage in boilers No. 9 and No. 10 (MMCF/month)

This limitation ensures the net NO_X emission increase from the modification to add Boilers No. 9 and No. 10 shall be less than 40 tons/yr and the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) are not applicable.

D.5.4 PSD Minor Limits [326 IAC 2-2]

Pursuant to Significant Source Modification 089-19678-00121, issued October 29, 2004 and in order to make the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall limit the total natural gas usage from boilers No. 1 though No. 10 and the temporary rental boiler to less than 2,550 MMCF per twelve (12) consecutive month period with compliance determined at the end of each month.

This is equivalent to 9.69 tons/yr of PM_{10} emissions and 107 tons/yr of CO emissions from boilers No. 1 through No. 10 and the temporary rental boiler. The net emission increases from this modification are limited to less than 15 tons/yr for PM_{10} and less than 100 tons/yr for CO. Therefore, the requirements of 326 IAC 2-2 (PSD) is not applicable.

D.5.5 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to boilers No. 9, No. 10, and the temporary rental boiler at the coke plant boiler house, except when otherwise specified in 40 CFR Part 60, Subpart Db.

D.5.6 NO_X Emissions [326 IAC 12-1][40 CFR 60, Subpart Db]

Pursuant to 40 CFR 60.44b(a), the NO_X emissions from each of the boilers No. 9, No. 10, and the temporary rental boiler at the coke plant boiler house shall not exceed 0.2 lbs/MMBtu when combusting natural gas.

D.5.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for the boilers and any associated control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.5.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [326 IAC 2-1.1-5] [40 CFR 60, Subpart Db]

Pursuant to Significant Source Modification 089-19678-0012, issued October 29, 2004 and in order to demonstrate compliance with Conditions D.5.3 and D.5.86, the Permittee shall perform NO_X testing for boilers No. 9, No. 10, and the temporary rental boiler not later than 60 days after achieving the maximum production, but not later than 180 days after initial startup, utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation wtih regard to the performance testing required by this condition. Pursuant to 40 CFR 60.46b(e), the performance test requirements may be satisfied by using 30 day average emission rate data from NO_X CEMs.

D.5.9 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2]

To demonstrate compliance with condition D.5.4, the Permittee shall perform Sulfur Fuel Sampling and Analysis. Section C - Sulfur Fuel Sampling and Analysis contains the Permittee's obligation with regard to the sampling and analysis required by this condition.

D.5.10 Particulate Matter Control

The lime storage silo baghouse shall be in operation and control particulate emissions at all times the silo is pneumatically loaded.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.5.11 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 12] [40 CFR 60, Subpart Db] [326 IAC 2-7-6(1),(6)]

In order to demonstrate compliance with condition D.5.6, the Permittee shall install, calibrate, maintain and operate a continuous monitoring system for Boilers No. 9 No. 10 and the temporary rental boiler for measuring NO_X emissions discharged to the atmosphere. The continuous monitoring system shall meet the performance specifications of 326 IAC 3-5-2 and 40 CFR 60.48b, and 40 CFR 60.13(h). 326 IAC 3-5 is not federally enforceable.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.12 Record Keeping Requirements

(a) To document the compliance status with Condition D.5.3(b), D.5.3(c) and D.5.6, the Permittee shall maintain records of the NO_X emissions from boilers No. 9, No. 10, and the temporary rental boiler in accordance with 40 CFR 60.49b.

(b) To document the compliance status with Condition D.5.3(d), the Permittee shall maintain monthly records of the following:

(1) total natural gas usage for boilers No. 1 through No. 8;

(2) natural gas usage for the temporary rental boiler;

(3) total natural gas usage for boilers No. 9 and No. 10; and

(4) calculated NO_X emissions using the equation listed in Condition D.5.3(d).

(c) To document the compliance status with Condition D.5.4, the Permittee shall maintain monthly records of the total natural gas usage for boilers No. 1 through No. 10 and the temporary rental boiler.

(d) To document the compliance status with Condition D.5.2, the Permittee shall maintain records in accordance with Section C - Sulfur Dioxide (SO_2) Record Keeping Requirements (Entire Source).

(e) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.5.13 Reporting Requirements

(a) A quarterly summary report to document compliance with condition D.5.2 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C – Sulfur Dioxide Reporting Requirements (Entire Source) contains the Permittee's obligation with regard to the reporting required by this condition.

(b) A quarterly summary of the information to document compliance with Conditions D.5.3(d) and D.5.4 shall be submitted not later than thirty (30) days after the end of the quarter being reported.

(c) The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.

D.5.14 Natural Gas Fired Boiler Certification

A semi-annual certification shall be submitted for the Number 2 Coke Plant Boiler House Boilers Nos. 3, through 10 and the rental natural gas fired boilers. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15): One (1) Number 3 Sinter Plant

(a) Three (3) Sinter Strands, constructed in 1958 , identified as ISS10379, ISS20380 and ISS30381, each with a 50 MMBtu per hour reheat burners identified as ISB001, ISB002 and ISB003 and a maximum capacity of 225 tons of sinter per hour each, controlled by two (2) Windbox Gas Cleaning Systems IS3203 and IS3204, installed in 1996, each comprised of a Quench Reactor, Dry Venturi Scrubber, a baghouse operated in series, exhausting to Windbox stacks IS6198 and IS6199 which are equipped with VOC CEMS.

(b) One (1) Cold Screen Station, identified as ISR00389, constructed in 1958, with a maximum capacity of 450 tons per hour, using a Baghouse IS3209 as a control device and exhausting to stack IS6207.

(c) One (1) S1/S2 Conveyer System, identified as ISY00388, constructed in 1979, with a maximum capacity of 450 tons per hour, that transfers sinter from the sinter coolers to the cold screening station, using a baghouse IS3208 as a control device and exhausting to stack IS6206.

(d) Three (3) Sinter Coolers, identified as ISC10385, ISC20386, and ISC30387, constructed in 1958, with a maximum capacity of 225 ton per hour each, with emissions exhausting to stacks IS6203, IS6204, and IS6205 respectively.

(e) Three (3) Sinter Strand Discharge End Areas, identified as ISS10379, ISS20380 and ISS0381, constructed in 1958, using three (3) baghouses as control devices, designated as IS3205, IS3206, and IS3207, exhausting to stacks IS6200, IS6201, and IS6202 respectively.

(f) Blended Material Storage Bin Building, identified as ISB00377, constructed in 1979, including bins, feeders and conveyors, with a maximum capacity of 1,000 tons per hour, using a Baghouse IS3196 as a control device and exhausting to stack IS6197.

(g) Storage and Blending Piles, identified as ISBP0376, with fugitive emissions.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants (HAPs): [326 IAC 20-1][40 CFR 63, Subpart A] [Table 4 to 40 CFR 63, Subpart FFFFF]

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the affected sources, No. 3 Sinter Plant Windbox exhaust, discharge end and sinter coolers, except when otherwise specified by Table 4 in 40 CFR 63, Subpart FFFFF.

D.6.2 Particulate Emissions Offset [326 IAC 2-3]

Pursuant to the significant source modification 089-12880-00121, issued July 26, 2001, the natural gas usage shall be less than 95.5 million standard cubic feet (MMSCF) or the coke oven gas usage shall be less than 1,637.4 MMSCF in the No. 3 Sinter Plant Sinter Strand Windbox reheat burners ISB001, ISB002 and ISB003 per 12-consecutive month period, with compliance demonstrated at the end of each month. Compliance with this limit makes 326 IAC 2-3 (Emissions Offset) not applicable.

D.6.3 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38]

Pursuant to 326 IAC 6.8-2-38, PM_{10} emissions from the No. 3 Sinter Plant shall comply with the following:

(a) The PM_{10} emissions from the No. 3 Sinter Plant Strand Windbox gas cleaning system stacks IS6198 and IS6199 emissions shall not exceed 0.020 grains per dry standard cubic foot and a total of 200.0 pounds per hour.

(b) The PM_{10} emissions from the No. 3 Sinter Plant Cold Screen Station Baghouse Stack IS6207 shall not exceed 0.0100 grains per dry standard cubic foot and 10.89 pounds per hour.

(c) The PM_{10} emissions from the No. 3 Sinter Plant S1/S2 Conveyor System Baghouse Stack IS6206 shall not exceed 0.0100 grains per dry standard cubic foot and 1.29 pounds per hour.

(d) The PM_{10} emissions from the No. 3 Sinter Plant Sinter Coolers Stacks IS6203, IS6204 and IS6205 shall not exceed 0.0300 grains per dry standard cubic foot and a total of 272.57 pounds per hour.

(e) The PM_{10} emissions from the No. 3 Sinter Plant Discharge Ends Area Baghouse Stacks IS6200, IS6201 and IS6202 shall not exceed 0.0100 grain per dry standard cubic foot and total of 20.57 pounds per hour.

(f) The PM_{10} emissions from the No. 3 Sinter Plant Blended Material Storage Bins Building Baghouse Stack IS6197 shall not exceed 0.0100 grain per dry standard cubic foot and 0.43 pounds per hour.

(g) Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emissions limitations apply to one (1) stack serving the multiple units specified when the facility description notes stack serving, and to each stack of multiple stacks serving multiple facilities when the facility description notes each stack serving.

D.6.4 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20]

Pursuant to 326 IAC 7-4.1-20 the SO_2 emissions from the Sinter Plant Windbox gas cleaning systems stacks IS6198 and IS6199 shall not exceed the following:

(a) Pursuant to 326 IAC 7-4.1-20(a)(1)(G), the SO_2 emissions from the Sinter Plant Windbox gas cleaning systems stacks IS6198 and IS6199 shall not exceed a total of 260.0 pounds per hour when the coke oven gas desulfurization plant is not in operation.

(b) Pursuant to 326 IAC 7-4.1-20(b)(7), the SO_2 emissions from the Sinter Plant Windbox gas cleaning systems stacks IS6198 and IS6199 shall not exceed a total of 200.0 pounds per hour when the coke oven gas desulfurization plant is in operation.

D.6.5 Volatile Organic Compounds (VOC) Limitations [326 IAC 8-13-3]

Pursuant to 326 IAC 8-13-3(b) and (c), the No. 3 Sinter Plant windbox gas cleaning system stacks (IS6198 and IS6199) shall not exceed the VOC emission limits as follows:

(a) During the period May 1 through September 30, the total VOC emissions (the seasonal cap) shall not exceed 256,948 pounds of VOC emissions. This is based on the following equation:

VOC (pounds) = 0.25 lb of VOC per ton of sinter produced x average daily sinter production rate of 6717.59 tons per day x 153 days

(b) Except as provided in 326 IAC 8-13-3(b)(3), on any day from May 1 through September 30, the sinter plant windbox exhaust VOC emissions (the maximum daily limit) shall not exceed 2,096 pounds of VOC emissions. This is based on the following equation:

VOC (pounds per day) = 0.25 lb of VOC per ton of sinter produced x maximum actual daily sinter production rate 8384 tons per day

(c) On any day from May 1 through September 30 when ozone levels in Lake, Porter, or LaPorte Counties are expected to exceed the national ambient air quality standard for ozone (either one (1) hour or eight (8) hour), the sinter plant windbox exhaust VOC emissions (the lower daily limit) shall not exceed 1,679 pounds of VOC emissions. This is based on the following equation:

VOC (pounds per day) = 0.25 lb of VOC per ton of sinter produced x maximum actual daily sinter production rate of 6716 tons per day

A high ozone level day shall be predicted in accordance with item (g)(4) of this condition.

(d) The maximum actual daily sinter production (tons per day) is equal to the maximum actual sinter produced on an operating day during the period from 1990 to 1997.

(e) The average daily sinter production equals either of the following:

(1) The annual average sinter production in tons divided by the annual average number of operating days in the period 1990 through 1994.

(2) In the event sinter production in 1990 to 1994 is not representative of the current sinter production due to factors, such as, but not limited to, routine repair, maintenance, or replacement, a source may elect to use the average actual sinter production in tons per day during a calendar year up to the year 1997, which represents current sinter production. The averaging period must include and not be less than the ozone season (May 1 through September 30).

(f) From October 1 through April 30, sinter plant windbox exhaust gas VOC emissions shall be limited to thirty-six hundredths (0.36) pound per ton of sinter produced. The limit shall be complied with on an operating day average basis.

(g) Pursuant to 326 IAC 8-13-4(b)(8) and an Ozone Action Plan dated August 2, 1999, the Permittee shall do the following:

(1) Control the sinter burden oil and grease content by regulating the amount of mill scale in the sinter burden.

(2) Use a continuous emissions monitoring system to ensure compliance with the applicable limits.

(3) Implement the following sequence of events upon discovery and initial internal notification of an actual or projected VOC emission limit, exceedance.

(A) Verify the exceedance.

(B) Determine the exceedance status: ceased or on-going.

(C) Implement corrective measures if a verified on-going exceedance condition exists. The feed rate of mill scale to the sinter burden from the

dedicated mill scale bin is reduced or terminated. Incremental reductions in the mill scale feed rate may be utilized.

(4) To predict high ozone days: the Permittee is a participant in IDEM's Partners for Clean Air Program and receives notification of Ozone Action Days from IDEM - OAQ. The Permittee will initiate the ozone action plan. A high ozone level day shall be predicted by the Permittee by using notification from IDEM, OAQ of an ozone action day.

D.6.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and any associated emission control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.6.7 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) Not later than thirty (30) months after issuance of this permit (Permit No. T089-7663-00121) or two and one half (2 ½) years from the date of the most recent compliance test which ever is earlier, in order to demonstrate compliance with Condition D.6.3, the Permittee shall perform simultaneous sampling and analysis of both non-condensable (front half) and condensable (back half) PM_{10} on Sinter Plant Windbox Gas Cleaning Systems Stacks IS6198 and IS6199, using methods as listed in 326 IAC 6.8-4-1(5) or a testing method approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

(b) Not later than thirty (30) months after issuance of this permit (Permit No. T089-7663-00121) or two and one half (2 ½) years from the date of the most recent compliance test which ever is earlier, in order to demonstrate compliance with Condition D.6.3, the Permittee shall perform PM_{10} testing on the Discharge Ends Area Baghouse Stacks IS6200, IS6201 and IS6202, using the appropriate methods to measure PM_{10} as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

(c) Not later than thirty (30) months after issuance of this permit (Permit No. T089-7663-00121) or five (5) years from the date of the most recent compliance test which ever is earlier, in order to demonstrate compliance with Condition D.6.3, the Permittee shall perform PM_{10} testing of the three (3) Sinter Coolers Stacks IS6203, IS6204 and IS6205, using the appropriate methods to measure PM_{10} as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

(d) Not later than thirty (30) months after issuance of this permit or five (5) years from the date of the most recent compliance test which ever is earlier, in order to demonstrate compliance with Condition D.6.4, the Permittee shall perform SO_2 testing on Sinter Windbox Gas Cleaning Systems Stacks IS6198 and IS6199, using methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

(e) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation wtih regard to the performance testing required by this condition.

D.6.8 Particulate Matter Control

(a) Except as otherwise provided by statue, rule or this permit the control devices as listed in (1) through (5) below shall be in operation at all times the associated processes are in operation to control particulate emissions.

(1) Sinter Plant Windbox Gas Cleaning System each comprised of a Quench Reactor, Dry Venturi Scrubber, and a Baghouse in series, identified as emission units IS3203 and IS3204, shall be in operation at all times when the No. 3 Sinter Plant Sinter Windbox is in operation.

(2) The Cold Screen Station Baghouse, identified as control device IS3209, shall be in operation at all times when the No. 3 Sinter Plant Cold Screen Station is in operation.

(3) The S1/S2 Conveyor System Baghouse, identified as control device IS3208, shall be in operation at all times material is conveyed by the No. 3 Sinter Plant S1/S2 conveyor system.

(4) The Sinter Strand Discharge Ends Area Baghouses, identified as control devices IS3205, IS3206, IS3207, shall be in operation at all times when the associated No. 3 Sinter Plant Sinter Strand Discharge Ends Area and Sinter Coolers are in operation.

(5) The Blended Material Storage Bins Baghouse, identified as control device IS3196, shall be in operation at all times when material is being transferred in the building.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

D.6.9 Visible Emissions Notations

(a) Visible emission notations of the Sinter Strand Windbox Gas Cleaning System stacks IS6198 and IS6199, Cold Screen Station Stack IS6207, Sinter Cooler Stacks IS6203, IS6204 and IS6205 and Discharge Ends Area Stacks IS6200, IS6201 and IS6202, shall be performed once per day during normal daylight operations when the No. 3 Sinter Plant Sinter Strand Windbox Gas Cleaning System, Cold Screen Station, Sinter Coolers and Discharge Ends Area are in operation. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation of this permit.

(f) The Permittee shall comply with the most current Continuous Compliance Plan visible emission evaluation program. Section C - Continuous Compliance Plan contains the Permittee's obligation with regard to the visible emission evaluation program required by this condition.

D.6.10 Parametric Monitoring

(a) The Permittee shall record the pressure drop and liquid reagent flow rate of the dry ventri scrubbers used in conjunction with the No. 3 Sinter Plant Sinter Strand Windbox Gas Cleaning Systems at least once per day when the No. 3 Sinter Plant Sinter Strand Windbox units are in operation. When for any one reading, the pressure drop across the scrubbers is outside the range of 3 to 8 inches of water and the flow rate of the scrubber is outside the range of 400 to 600 gallons per minute (gpm) or a range established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure drop or flow rate that is outside the above mentioned ranges is not a deviation from this permit. Failure to take response steps shall be considered a deviation of this permit.

(b) The Permittee shall record the pressure drop of the baghouse used in conjunction with the No. 3 Sinter Plant Discharge Ends Area at least once per day when the No. 3 Sinter Plant Discharge Ends Area is in operation. When for any one reading, the pressure drop across the baghouse is outside the range of 3 to 8 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response shall be considered a deviation of this permit.

(c) The Permittee shall record the pressure drop of the baghouse used in conjunction with the No. 3 Sinter Plant Cold Screen Station at least once per day when the No. 3 Sinter Plant Cold Screen Station is in operation. When for any one reading, the pressure drop across the baghouse is outside the range of 3 to 8 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation of this permit.

(d) The Permittee shall comply with the most current Continuous Compliance Plan for the baghouse operation, recording and maintenance. Section C - Continuous Compliance Plan contains the Permittee's obligation with regards to the baghouse operation, recording and maintenance required by this condition.

(e) The instruments used for determining the pressure drop and flow rate shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.6.11 Scrubber Failure Detection

In the event, a scrubber failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions).

D.6.12 Continuous Emissions Monitoring (VOC)[326 IAC 8-13-8][326 IAC 3-5]

The Permittee shall operate the continuous emissions monitoring system (CEMS) for the measurement of VOC emissions discharged into the atmosphere from the No. 3 Sinter Plant Sinter Windbox gas cleaning system stacks IS6198 and IS6199, in accordance with 326 IAC 8-13-8, and 326 IAC 3-5.

(a) The continuous emissions monitoring system (CEMS) shall measure VOC emission rate in pounds per hour.

(b) The Permittee shall demonstrate compliance with Condition D.6.6 utilizing data from the VOC CEMS and 326 IAC 8-13-3(b) calculations.

(c) The Permittee shall follow the maintenance, operating procedures, quality assurance procedures and performance specifications for the VOC CEMs in 326 IAC 3-5.

(d) In the event of an exceedance of VOC emissions, the Permittee shall implement the corrective action plan requirements in 326 IAC 8-13-4(b)(5).

D.6.13 VOC Monitoring Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

Whenever the VOC continuous emission monitoring system is malfunctioning or down for repairs or adjustments for more than four (4) hours, the following method shall be used to provide information related to VOC emissions:

(a) The Permittee shall not include oily scale in the sinter plant burden raw materials, and

(b) Sample and analyze the sinter burden for oil and grease utilizing the methods and calculations in 326 IAC 8-13-5(d).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.14 General Record Keeping Requirements

(a) To document the compliance status with Condition D.6.2 and pursuant to Significant Source Modification 089-12880-00121, issued on July 26, 2001, the Permittee shall maintain records of the Coke oven gas and natural gas usage in the No. 3 Sinter Plant Strand Windbox gas reheat burners ISB001, ISB002 and ISB003.

(b) To document the compliance status with Condition D.6.4, the Permittee shall maintain records in accordance with Section C – Sulfur Dioxide (SO_2) Record Keeping (Entire Source).

(c) To document the compliance status with Condition D.6.5, the Permittee shall maintain the following records:

(1) Records of the VOC emissions monitoring data for the period May 1 through September 30, as follows:

(A) The VOC emitted each day.

(B) The cumulative total of VOC emitted.

(C) The sinter produced each operating day.

(2) Maintain records of the VOC continuous emissions monitor system (CEMS) as required in 326 IAC 3-5.

(d) To document the compliance status with Condition D.6.9 the Permittee shall maintain records of once per day visible emission notations of the Sinter Cooler Stacks IS6203, IS6204 and IS6205 exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(e) To document the compliance status with Condition D.6.10, the Permittee shall maintain the records of the Sinter Plant Windbox Gas Cleaning system pressure drop across the baghouse; pressure drop and flow rate of the Sinter Plant Windbox Gas Cleaning Scrubbers; pressure drop across the Cold Screen Station Baghouse and pressure drop across the Discharge Ends Area baghouse during normal operation on at least a once per day basis. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g. the process did not operate that day).

(f) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.6.15 General Reporting Requirements

(a) Pursuant to Significant Source modification 089-12880-00121, a quarterly summary of the natural gas and coke oven gas usage at the No. 3 Sinter Plant Sinter Strands Windbox recirculating burners per 12-consecutive month period with compliance demonstrated at the end of each month to document the compliance status with Conditions D.6.2, shall be submitted not later than thirty (30) days after the end of the quarter being reported.

(b) Pursuant to 326 IAC 8-13-8(a)(3), reports to document the compliance status with Condition D.6.5, shall be as follows:

(1) For VOC Continuous Emissions Monitoring System (CEMS), the following reports shall be submitted:

(A) A report shall be submitted within thirty (30) days of an exceedance of VOC emission limits in D.6.6 containing the following information:

(i) The name and location of the source.

(ii) The nature of the exceedance.

(iii) The date of the occurrence.

(iv) The cause of the exceedance, such as, but not limited to, production rates or characteristics of the sinter burden.

(v) The corrective action taken according to the corrective action plan in 326 IAC 8-13-4(b)(5).

(B) Submit the CEM certification reports according to the procedures and schedule in 326 IAC 3-5.

(c) A quarterly summary report to document the compliance status with condition D.6.4 shall be not later than thirty (30) days after the end of the quarter being reported. Section C – Sulfur Dioxide (SO_2) Reporting Requirements (Entire Source) contains the Permittee's obligation with regard to the reporting required by this condition.

(d) The reports submitted by the Permittee do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel manufacturing [40 CFR 63, Subpart FFFFF]

D.6.16 National Emission Standards for Hazardous Air Pollutants (HAPs): Integrated iron and Steel Manufacturing – Sinter Plants [40 CFR 63, Subpart FFFFF]

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart FFFFF—National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities

Source: 68 FR 27663, May 20, 2003, unless otherwise noted.

What This Subpart Covers

§ 63.7780 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for integrated iron and steel manufacturing facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with all applicable emission limitations and operation and maintenance requirements in this subpart.

§ 63.7781 Am I subject to this subpart?

You are subject to this subpart if you own or operate an integrated iron and steel manufacturing facility that is (or is part of) a major source of hazardous air pollutants (HAP) emissions. Your integrated iron and steel manufacturing facility is a major source of HAP if it emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

§ 63.7782 What parts of my plant does this subpart cover?

(a) This subpart applies to each new and existing affected source at your integrated iron and steel manufacturing facility.

(b) The affected sources are each new or existing sinter plant, blast furnace, and basic oxygen process furnace (BOPF) shop at your integrated iron and steel manufacturing facility.

(c) This subpart covers emissions from the sinter plant windbox exhaust, discharge end, and sinter cooler; the blast furnace casthouse; and the BOPF shop including each individual BOPF and shop ancillary operations (hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy).

(d) A sinter plant, blast furnace, or BOPF shop at your integrated iron and steel manufacturing facility is existing if you commenced construction or reconstruction of the affected source before July 13, 2001.

(e) A sinter plant, blast furnace, or BOPF shop at your integrated iron and steel manufacturing facility is new if you commence construction or reconstruction of the affected source on or after July 13, 2001. An affected source is reconstructed if it meets the definition of reconstruction in §63.2.

§ 63.7783 When do I have to comply with this subpart?

(a) If you have an existing affected source, you must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to you by the dates specified in paragraphs (a)(1) and (2) of this section.

(1) No later than May 22, 2006 for all emissions sources at an existing affected source except for a sinter cooler at an existing sinter plant.

(2) No later than January 13, 2007 for a sinter cooler at an existing sinter plant.

(b) If you have a new affected source and its initial startup date is on or before May 20, 2003, then you must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to you by May 20, 2003.

(c) If you have a new affected source and its initial startup date is after May 20, 2003, you must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to you upon initial startup.

(d) If your integrated iron and steel manufacturing facility is not a major source and becomes a major source of HAP, the following compliance dates apply to you.

(1) Any portion of the existing integrated iron and steel manufacturing facility that becomes a new affected source or a new reconstructed source must be in compliance with this subpart upon startup.

(2) All other parts of the integrated iron and steel manufacturing facility must be in compliance with this subpart no later than 2 years after it becomes a major source.

(e) You must meet the notification and schedule requirements in §63.7840. Several of these notifications must be submitted before the compliance date for your affected source.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39585, July 13, 2006]

Emission Limitations

§ 63.7790 What emission limitations must I meet?

(a) You must meet each emission limit and opacity limit in Table 1 to this subpart that applies to you.

(b) You must meet each operating limit for capture systems and control devices in paragraphs (b)(1) through (3) of this section that applies to you.

(1) You must operate each capture system applied to emissions from a sinter plant discharge end or blast furnace casthouse or to secondary emissions from a BOPF at or above the lowest value or settings established for the operating limits in your operation and maintenance plan;

(2) For each venturi scrubber applied to meet any particulate emission limit in Table 1 to this subpart, you must maintain the hourly average pressure drop and scrubber water flow rate at or above the minimum levels established during the initial performance test.

(c) An owner or operator who uses an air pollution control device other than a baghouse, venturi scrubber, or electrostatic precipitator must submit a description of the device; test results collected in accordance with §63.7822

verifying the performance of the device for reducing emissions of particulate matter to the atmosphere to the levels required by this subpart; a copy of the operation and maintenance plan required in §63.7800(b); and appropriate operating parameters that will be monitored to maintain continuous compliance with the applicable emission limitation(s). The monitoring plan identifying the operating parameters to be monitored is subject to approval by the Administrator.

(d) For each sinter plant, you must either:

(1) Maintain the 30-day rolling average oil content of the feedstock at or below 0.02 percent; or

(2) Maintain the 30-day rolling average of volatile organic compound emissions from the windbox exhaust stream at or below 0.2 lb/ton of sinter.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39585, July 13, 2006]

Operation and Maintenance Requirements

§ 63.7800 What are my operation and maintenance requirements?

(a) As required by §63.6(e)(1)(i), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.

(b) You must prepare and operate at all times according to a written operation and maintenance plan for each capture system or control device subject to an operating limit in §63.7790(b). Each plan must address the elements in paragraphs (b)(1) through (7) of this section.

(1) Monthly inspections of the equipment that is important to the performance of the total capture system (*e.g.,* pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (*e.g.,* presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in the ductwork, and fan erosion). The operation and maintenance plan also must include requirements to repair any defect or deficiency in the capture system before the next scheduled inspection.

(2) Preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

(3) Operating limits for each capture system applied to emissions from a sinter plant discharge end or blast furnace casthouse, or to secondary emissions from a BOPF. You must establish the operating limits according to the requirements in paragraphs (b)(3)(i) through (iii) of this section.

(i) Select operating limit parameters appropriate for the capture system design that are representative and reliable indicators of the performance of the capture system. At a minimum, you must use appropriate operating limit parameters that indicate the level of the ventilation draft and the damper position settings for the capture system when operating to collect emissions, including revised settings for seasonal variations. Appropriate operating limit parameters for ventilation draft include, but are not limited to, volumetric flow rate through each separately ducted hood, total volumetric flow rate at the inlet to the control device to which the capture system is vented, fan motor amperage, or static pressure.

(ii) For each operating limit parameter selected in paragraph (b)(3)(i) of this section, designate the value or setting for the parameter at which the capture system operates during the process operation. If your operation allows for more than one process to be operating simultaneously, designate the value or setting for the parameter at which the capture system operates during each possible configuration that you may operate.

(iii) Include documentation in your plan to support your selection of the operating limits established for the capture system. This documentation must include a description of the capture system design, a description of the capture system operating during production, a description of each selected operating limit parameter, a rationale for why you

chose the parameter, a description of the method used to monitor the parameter according to the requirements of §63.7830(a), and the data used to set the value or setting for the parameter for each of your process configurations.

(4) Corrective action procedures for baghouses equipped with bag leak detection systems or continuous opacity monitoring systems (COMS). In the event a bag leak detection system alarm is triggered or emissions from a baghouse equipped with a COMS exceed an hourly average opacity of 5 percent, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Corrective actions may include, but are not limited to:

(i) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media or otherwise repairing the control device.

(iv) Sealing off a defective baghouse compartment.

(v) Cleaning the bag leak detection system probe, or otherwise repair the bag leak detection system.

(vi) Shutting down the process producing the particulate emissions.

(5) Corrective action procedures for venturi scrubbers equipped with continuous parameter monitoring systems (CPMS). In the event a venturi scrubber exceeds the operating limit in §63.7790(b)(2), you must take corrective actions consistent with your site-specific monitoring plan in accordance with §63.7831(a).

(7) Procedures for determining and recording the daily sinter plant production rate in tons per hour.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39585, July 13, 2006]

General Compliance Requirements

§ 63.7810 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in §63.2.

(b) During the period between the compliance date specified for your affected source in §63.7783 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(c) You must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3).

[68 FR 27663, May 20, 2003, as amended at 71 FR 20468, Apr. 20, 2006]

Initial Compliance Requirements

§ 63.7820 By what date must I conduct performance tests or other initial compliance demonstrations?

(a) You must conduct a performance test to demonstrate initial compliance with each emission and opacity limit in Table 1 to this subpart that applies to you. You must also conduct a performance test to demonstrate initial compliance with the 30-day rolling average operating limit for the oil content of the sinter plant feedstock in

§63.7790(d)(1) or alternative limit for volatile organic compound emissions from the sinter plant windbox exhaust stream in §63.7790(d)(2). You must conduct the performance tests within 180 calendar days after the compliance date that is specified in §63.7783 for your affected source and report the results in your notification of compliance status.

(b) For each operation and maintenance requirement that applies to you where initial compliance is not demonstrated using a performance test or opacity observation, you must demonstrate initial compliance within 30 calendar days after the compliance date that is specified for your affected source in §63.7783.

(c) If you commenced construction or reconstruction between July 13, 2001 and May 20, 2003, you must demonstrate initial compliance with either the proposed emission limit or the promulgated emission limit no later than November 17, 2003 or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(d) If you commenced construction or reconstruction between July 13, 2001 and May 20, 2003, and you chose to comply with the proposed emission limit when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limit by November 17, 2006, or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

§ 63.7821 When must I conduct subsequent performance tests?

(a) You must conduct subsequent performance tests to demonstrate compliance with all applicable PM and opacity limits in Table 1 to this subpart at the frequencies specified in paragraphs (b) through (d) of this section.

(b) For each sinter cooler at an existing sinter plant and each emissions unit equipped with a control device other than a baghouse, you must conduct subsequent performance tests no less frequently than twice (at mid-term and renewal) during each term of your title V operating permit.

(c) For each emissions unit equipped with a baghouse, you must conduct subsequent performance tests no less frequently than once during each term of your title V operating permit.

(d) For sources without a title V operating permit, you must conduct subsequent performance tests every 2.5 years.

[71 FR 39586, July 13, 2006]

§ 63.7822 What test methods and other procedures must I use to demonstrate initial compliance with the emission limits for particulate matter?

(a) You must conduct each performance test that applies to your affected source according to the requirements in §63.7(e)(1) and the conditions detailed in paragraphs (b) through (i) of this section.

(b) To determine compliance with the applicable emission limit for particulate matter in Table 1 to this subpart, follow the test methods and procedures in paragraphs (b)(1) and (2) of this section.

(1) Determine the concentration of particulate matter according to the following test methods in appendix A to part 60 of this chapter:

(i) Method 1 to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 5, 5D, or 17, as applicable, to determine the concentration of particulate matter (front half filterable catch only).

(2) Collect a minimum sample volume of 60 dry standard cubic feet (dscf) of gas during each particulate matter test run. Three valid test runs are needed to comprise a performance test.

(c) For each sinter plant windbox exhaust stream, you must complete the requirements of paragraphs (c)(1) and (2) of this section:

(1) Follow the procedures in your operation and maintenance plan for measuring and recording the sinter production rate for each test run in tons per hour; and

(2) Compute the process-weighted mass emissions (E_p) for each test run using Equation 1 of this section as follows:

$$E_p = \frac{C \times Q}{P \times K} \qquad \text{(Eq. 1)}$$

Where:

E_p= Process-weighted mass emissions of particulate matter, lb/ton;

C = Concentration of particulate matter, grains per dry standard cubic foot (gr/dscf);

Q = Volumetric flow rate of stack gas, dry standard cubic foot per hour (dscf/hr);

P = Production rate of sinter during the test run, tons/hr; and

K = Conversion factor, 7,000 grains per pound (gr/lb).

(d) If you apply two or more control devices in parallel to emissions from a sinter plant discharge end or a BOPF, compute the average flow-weighted concentration for each test run using Equation 2 of this section as follows:

$$C_W = \frac{\sum_{i=1}^{n} C_i Q_i}{\sum_{i=1}^{n} Q_i} \qquad \text{(Eq. 2)}$$

Where:

C_w= Flow-weighted concentration, gr/dscf;

C_i= Concentration of particulate matter from exhaust stream “i”, gr/dscf; and

Q_i= Volumetric flow rate of effluent gas from exhaust stream “i”, dry standard cubic foot per minute (dscfm).

(i) Subject to approval by the permitting authority, you may conduct representative sampling of stacks when there are more than three stacks associated with a process.

§ 63.7823 What test methods and other procedures must I use to demonstrate initial compliance with the opacity limits?

(a) You must conduct each performance test that applies to your affected source according to the requirements in §63.7(h)(5) and the conditions detailed in paragraphs (b) through (d) of this section.

(b) You must conduct each visible emissions performance test such that the opacity observations overlap with the performance test for particulate matter.

(c) To determine compliance with the applicable opacity limit in Table 1 to this subpart for a sinter plant discharge end or a blast furnace casthouse:

(1) Using a certified observer, determine the opacity of emissions according to Method 9 in appendix A to part 60 of this chapter.

(2) Obtain a minimum of 30 6-minute block averages. For a blast furnace casthouse, make observations during tapping of the furnace. Tapping begins when the furnace is opened, usually by creating a hole near the bottom of the furnace, and ends when the hole is plugged.

(e) To determine compliance with the applicable opacity limit in Table 1 to this subpart for a sinter cooler at an existing sinter plant:

(1) Using a certified observer, determine the opacity of emissions according to Method 9 in appendix A to part 60 of this chapter.

(2) Obtain a minimum of 30 6-minute block averages.

(3) Make visible emission observations of uncovered portions of sinter plant coolers with the observer's line of sight generally in the direction of the center of the cooler.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39586, July 13, 2006]

§ 63.7824 What test methods and other procedures must I use to establish and demonstrate initial compliance with operating limits?

(a) For each capture system subject to an operating limit in §63.7790(b)(1), you must certify that the system operated during the performance test at the site-specific operating limits established in your operation and maintenance plan using the procedures in paragraphs (a)(1) through (4) of this section.

(1) Concurrent with all opacity observations, measure and record values for each of the operating limit parameters in your capture system operation and maintenance plan according to the monitoring requirements specified in §63.7830(a).

(2) For any dampers that are manually set and remain at the same position at all times the capture system is operating, the damper position must be visually checked and recorded at the beginning and end of each opacity observation period segment.

(3) Review and record the monitoring data. Identify and explain any times the capture system operated outside the applicable operating limits.

(4) Certify in your performance test report that during all observation period segments, the capture system was operating at the values or settings established in your capture system operation and maintenance plan.

(b) For a venturi scrubber subject to operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you must establish site-specific operating limits according to the procedures in paragraphs (b)(1) and (2) of this

section. You may establish the parametric monitoring limit during the initial performance test or during any other performance test run that meets the emission limit.

(1) Using the CPMS required in §63.7830(c), measure and record the pressure drop and scrubber water flow rate during each run of the particulate matter performance test.

(2) Compute and record the hourly average pressure drop and scrubber water flow rate for each individual test run. Your operating limits are the lowest average pressure drop and scrubber water flow rate value in any of the three runs that meet the applicable emission limit.

(c) You may change the operating limits for a capture system or venturi scrubber if you meet the requirements in paragraphs (c)(1) through (3) of this section.

(1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate compliance with the applicable emission limitation in Table 1 to this subpart.

(3) Establish revised operating limits according to the applicable procedures in paragraphs (a) and (b) of this section for a control device or capture system.

(d) For each sinter plant subject to the operating limit for the oil content of the sinter plant feedstock in §63.7790(d)(1), you must demonstrate initial compliance according to the procedures in paragraphs (d)(1) through (3) of this section.

(1) Sample the feedstock at least three times a day (once every 8 hours), composite the three samples each day, and analyze the composited samples using Method 9071B, “n-Hexane Extractable Material(HEM) for Sludge, Sediment, and Solid Samples,” (Revision 2, April 1998). Method 9071B is incorporated by reference (see §63.14) and is published in EPA Publication SW–846 “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods.” Record the sampling date and time, oil content values, and sinter produced (tons/day).

(2) Continue the sampling and analysis procedure for 30 consecutive days.

(3) Each day, compute and record the 30-day rolling average using that day's value and the 29 previous daily values.

(e) To demonstrate initial compliance with the alternative operating limit for volatile organic compound emissions from the sinter plant windbox exhaust stream in §63.7790(d)(2), follow the test methods and procedures in paragraphs (e)(1) through (5) of this section.

(1) Determine the volatile organic compound emissions according to the following test methods in appendix A to part 60 of this chapter:

(i) Method 1 to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 25 to determine the mass concentration of volatile organic compound emissions (total gaseous nonmethane organics as carbon) from the sinter plant windbox exhaust stream stack.

(2) Determine volatile organic compound (VOC) emissions every 24 hours (from at least three samples taken at 8-hour intervals) using Method 25 in 40 CFR part 60, appendix A. Record the sampling date and time, sampling results, and sinter produced (tons/day).

(3) Compute the process-weighted mass emissions (E_v) each day using Equation 1 of this section as follows:

$$E_v = \frac{M_c \times Q}{35.31 \times 454,000 \times K} \qquad \text{(Eq. 1)}$$

Where:

E_v= Process-weighted mass emissions of volatile organic compounds, lb/ton;

M_c= Average concentration of total gaseous nonmethane organics as carbon by Method 25 (40 CFR part 60, appendix A), milligrams per dry standard cubic meters (mg/dscm) for each day;

Q = Volumetric flow rate of stack gas, dscf/hr;

35.31 = Conversion factor (dscf/dscm);

454,000 = Conversion factor (mg/lb); and

K = Daily production rate of sinter, tons/hr.

(4) Continue the sampling and analysis procedures in paragraphs (e)(1) through (3) of this section for 30 consecutive days.

(5) Compute and record the 30-day rolling average of VOC emissions for each operating day.

(f) You may use an alternative test method to determine the oil content of the sinter plant feedstock or the volatile organic compound emissions from the sinter plant windbox exhaust stack if you have already demonstrated the equivalency of the alternative method for a specific plant and have received previous approval from the applicable permitting authority.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39586, July 13, 2006]

§ 63.7825 How do I demonstrate initial compliance with the emission limitations that apply to me?

(a) For each affected source subject to an emission or opacity limit in Table 1 to this subpart, you have demonstrated initial compliance if:

(1) You meet the conditions in Table 2 to this subpart; and

(2) For each capture system subject to the operating limit in §63.7790(b)(1), you have established appropriate site-specific operating limit(s) and have a record of the operating parameter data measured during the performance test in accordance with §63.7824(a)(1); and

(3) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you have established appropriate site-specific operating limits and have a record of the pressure drop and scrubber water flow rate measured during the performance test in accordance with §63.7824(b).

(b) For each existing or new sinter plant subject to the operating limit in §63.7790(d)(1), you have demonstrated initial compliance if the 30-day rolling average of the oil content of the feedstock, measured during the initial performance

test in accordance with §63.7824(d) is no more than 0.02 percent. For each existing or new sinter plant subject to the alternative operating limit in §63.7790(d)(2), you have demonstrated initial compliance if the 30-day rolling average of the volatile organic compound emissions from the sinter plant windbox exhaust stream, measured during the initial performance test in accordance with §63.7824(e) is no more than 0.2 lb/ton of sinter produced.

(c) For each emission limitation that applies to you, you must submit a notification of compliance status according to §63.7840(e).

[68 FR 27663, May 20, 2003, as amended at 71 FR 39586, July 13, 2006]

§ 63.7826 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

(a) For a capture system applied to emissions from a sinter plant discharge end or blast furnace casthouse or to secondary emissions from a BOPF, you have demonstrated initial compliance if you meet all of the conditions in paragraphs (a)(1) through (4) of this section.

(1) Prepared the capture system operation and maintenance plan according to the requirements of §63.7800(b), including monthly inspection procedures and detailed descriptions of the operating parameter(s) selected to monitor the capture system;

(2) Certified in your performance test report that the system operated during the test at the operating limits established in your operation and maintenance plan;

(3) Submitted a notification of compliance status according to the requirements in §63.7840(e), including a copy of the capture system operation and maintenance plan and your certification that you will operate the capture system at the values or settings established for the operating limits in that plan; and

(4) Prepared a site-specific monitoring plan according to the requirements in §63.7831(a).

(b) For each control device subject to operating limits in §63.7790(b)(2) or (3), you have demonstrated initial compliance if you meet all the conditions in paragraphs (b)(1) through (3) of this section.

(1) Prepared the control device operation and maintenance plan according to the requirements of §63.7800(b), including a preventative maintenance schedule and, as applicable, detailed descriptions of the corrective action procedures for baghouses and other control devices;

(2) Submitted a notification of compliance status according to the requirements in §63.7840(e), including a copy of the operation and maintenance plan; and

(3) Prepared a site-specific monitoring plan according to the requirements in §63.7831(a).

[68 FR 27663, May 20, 2003, as amended at 71 FR 39586, July 13, 2006]

Continuous Compliance Requirements

§ 63.7830 What are my monitoring requirements?

(a) For each capture system subject to an operating limit in §63.7790(b)(1) established in your capture system operation and maintenance plan, you must install, operate, and maintain a CPMS according to the requirements in §63.7831(e) and the requirements in paragraphs (a)(1) through (3) of this section.

(1) Dampers that are manually set and remain in the same position are exempt from the requirement to install and operate a CPMS. If dampers are not manually set and remain in the same position, you must make a visual check at least once every 24 hours to verify that each damper for the capture system is in the same position as during the initial performance test.

(2) If you use a flow measurement device to monitor the operating limit parameter for a sinter plant discharge end or blast furnace casthouse, you must monitor the hourly average rate (*e.g.,* the hourly average actual volumetric flow rate through each separately ducted hood, the average hourly total volumetric flow rate at the inlet to the control device) according to the requirements in §63.7832.

(b) Except as provided in paragraph (b)(3) of this section, you must meet the requirements in paragraph (b)(1) or (2) of this section for each baghouse applied to meet any particulate emission limit in Table 1 to this subpart. You must conduct inspections of each baghouse according to the requirements in paragraph (b)(4) of this section.

(1) Install, operate, and maintain a bag leak detection system according to §63.7831(f) and monitor the relative change in particulate matter loadings according to the requirements in §63.7832; or

(2) If you do not install and operate a bag leak detection system, you must install, operate, and maintain a COMS according to the requirements in §63.7831(h) and monitor the hourly average opacity of emissions exiting each control device stack according to the requirements in §63.7832.

(3) A bag leak detection system and COMS are not required for a baghouse that meets the requirements in paragraphs (b)(3)(i) and (ii) of this section.

(i) The baghouse is a positive pressure baghouse and is not equipped with exhaust gas stacks; and

(ii) The baghouse was installed before August 30, 2005.

(4) You must conduct inspections of each baghouse at the specified frequencies according to the requirements in paragraphs (b)(4)(i) through (viii) of this section.

(i) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual.

(ii) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms.

(iii) Check the compressed air supply for pulse-jet baghouses each day.

(iv) Monitor cleaning cycles to ensure proper operation using an appropriate methodology.

(v) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means.

(vi) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or laying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices.

(vii) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks.

(viii) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

(c) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you must install, operate, and maintain CPMS according to the requirements in §63.7831(g) and monitor the hourly average pressure drop and water flow rate according to the requirements in §63.7832.

(d) For each electrostatic precipitator subject to the opacity operating limit in §63.7790(b)(3), you must install, operate, and maintain a COMS according to the requirements in §63.7831(h) and monitor the hourly average opacity of emissions exiting each control device stack according to the requirements in §63.7832.

(e) For each sinter plant subject to the operating limit in §63.7790(d), you must either:

(1) Compute and record the 30-day rolling average of the oil content of the feedstock for each operating day using the procedures in §63.7824(d); or

(2) Compute and record the 30-day rolling average of the volatile organic compound emissions (lbs/ton of sinter) for each operating day using the procedures in §63.7824(e).

[68 FR 27663, May 20, 2003, as amended at 71 FR 39586, July 13, 2006]

§ 63.7831 What are the installation, operation, and maintenance requirements for my monitors?

(a) For each CPMS required in §63.7830, you must develop and make available for inspection upon request by the permitting authority a site-specific monitoring plan that addresses the requirements in paragraphs (a)(1) through (8) of this section.

(1) Installation of the CPMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.,* on or downstream of the last control device);

(2) Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system;

(3) Performance evaluation procedures and acceptance criteria (*e.g.,* calibrations);

(4) Ongoing operation and maintenance procedures in accordance with the general requirements of §§63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8);

(5) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d);

(6) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §§63.10(c), (e)(1), and (e)(2)(i);

(7) Corrective action procedures you will follow in the event a venturi scrubber exceeds the operating limit in §63.7790(b)(2); and

(8) Corrective action procedures you will follow in the event an electrostatic precipitator exceeds the operating limit in §63.7790(b)(3).

(b) Unless otherwise specified, each CPMS must:

(1) Complete a minimum of one cycle of operation for each successive 15-minute period and collect a minimum of three of the required four data points to constitute a valid hour of data;

(2) Provide valid hourly data for at least 95 percent of every averaging period; and

(3) Determine and record the hourly average of all recorded readings.

(c) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(d) You must operate and maintain the CPMS in continuous operation according to the site-specific monitoring plan.

(e) For each capture system subject to an operating limit in §63.7790(b)(1), you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a) through (d) of this section.

(f) For each baghouse equipped with a bag leak detection system according to §63.7830(b)(1), you must install, operate, and maintain the bag leak detection system according to the requirements in paragraphs (f)(1) through (7) of this section.

(1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(2) The system must provide output of relative changes in particulate matter loadings.

(3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over a preset level. The alarm must be located such that it can be heard by the appropriate plant personnel.

(4) Each system that works based on the triboelectric effect must be installed, operated, and maintained in a manner consistent with the guidance document, “Fabric Filter Bag Leak Detection Guidance,” EPA–454/R–98–015, September 1997. You may install, operate, and maintain other types of bag leak detection systems in a manner consistent with the manufacturer's written specifications and recommendations.

(5) To make the initial adjustment of the system, establish the baseline output by adjusting the sensitivity (range) and the averaging period of the device. Then, establish the alarm set points and the alarm delay time.

(6) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in your operation and maintenance plan. Do not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365-day period unless a responsible official certifies, in writing, that the baghouse has been inspected and found to be in good operating condition.

(7) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(g) For each venturi scrubber subject to operating limits in §63.7790(b)(2) for pressure drop and scrubber water flow rate, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a) through (d) of this section.

(h) For each electrostatic precipitator subject to the opacity operating limit in §63.7790(b)(3) and each baghouse equipped with a COMS according to §63.7830(b)(2), you must install, operate, and maintain each COMS according to the requirements in paragraphs (h)(1) through (4) of this section.

(1) You must install, operate, and maintain each COMS according to Performance Specification 1 in 40 CFR part 60, appendix B.

(2) You must conduct a performance evaluation of each COMS according to §63.8 and Performance Specification 1 in appendix B to 40 CFR part 60.

(3) Each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(4) COMS data must be reduced to 6-minute averages as specified in §63.8(g)(2) and to hourly averages where required by this subpart.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39587, July 13, 2006]

§ 63.7832 How do I monitor and collect data to demonstrate continuous compliance?

(a) Except for monitoring malfunctions, out-of-control periods as specified in §63.8(c)(7), associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times an affected source is operating.

(b) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels or to fulfill a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance.

(c) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

§ 63.7833 How do I demonstrate continuous compliance with the emission limitations that apply to me?

(a) You must demonstrate continuous compliance for each affected source subject to an emission or opacity limit in §63.7790(a) by meeting the requirements in Table 3 to this subpart.

(b) You must demonstrate continuous compliance for each capture system subject to an operating limit in §63.7790(b)(1) by meeting the requirements in paragraphs (b)(1) and (2) of this section.

(1) Operate the capture system at or above the lowest values or settings established for the operating limits in your operation and maintenance plan; and

(2) Monitor the capture system according to the requirements in §63.7830(a) and collect, reduce, and record the monitoring data for each of the operating limit parameters according to the applicable requirements of this subpart;

(c) For each baghouse applied to meet any particulate emission limit in Table 1 to this subpart, you must demonstrate continuous compliance by meeting the requirements in paragraph (c)(1) or (2) of this section as applicable, and paragraphs (c)(3) and (4) of this section:

(1) For a baghouse equipped with a bag leak detection system, operating and maintaining each bag leak detection system according to §63.7831(f) and recording all information needed to document conformance with these requirements. If you increase or decrease the sensitivity of the bag leak detection system beyond the limits specified in §63.7831(f)(6), you must include a copy of the required written certification by a responsible official in the next semiannual compliance report.

(2) For a baghouse equipped with a COMS, operating and maintaining each COMS and reducing the COMS data according to §63.7831(h).

(3) Inspecting each baghouse according to the requirements in §63.7830(b)(4) and maintaining all records needed to document conformance with these requirements.

(4) Maintaining records of the time you initiated corrective action in the event of a bag leak detection system alarm or when the hourly average opacity exceeded 5 percent, the corrective action(s) taken, and the date on which corrective action was completed.

(d) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you must demonstrate continuous compliance by meeting the requirements of paragraphs (d)(1) through (4) of this section:

(1) Maintaining the hourly average pressure drop and scrubber water flow rate at levels no lower than those established during the initial or subsequent performance test;

(2) Operating and maintaining each venturi scrubber CPMS according to §63.7831(g) and recording all information needed to document conformance with these requirements; and

(3) Collecting and reducing monitoring data for pressure drop and scrubber water flow rate according to §63.7831(b) and recording all information needed to document conformance with these requirements.

(4) If the hourly average pressure drop or scrubber water flow rate is below the operating limits, you must follow the corrective action procedures in paragraph (g) of this section.

(e) For each electrostatic precipitator subject to the opacity operating limit in §63.7790(b)(3), you must demonstrate continuous compliance by meeting the requirements of paragraphs (e)(1) through (3) of this section:

(1) Maintaining the hourly average opacity of emissions no higher than 10 percent; and

(2) Operating and maintaining each COMS and reducing the COMS data according to §63.7831(h).

(3) If the hourly average opacity of emissions exceeds 10 percent, you must follow the corrective action procedures in paragraph (g) of this section.

(f) For each new or existing sinter plant subject to the operating limit in §63.7790(d), you must demonstrate continuous compliance by either:

(1) For the sinter plant feedstock oil content operating limit in §63.7790(d)(1),

(i) Computing and recording the 30-day rolling average of the percent oil content for each operating day according to the performance test procedures in §63.7824(d);

(ii) Recording the sampling date and time, oil content values, and sinter produced (tons/day); and

(iii) Maintaining the 30-day rolling average oil content of the feedstock no higher than 0.02 percent.

(2) For the volatile organic compound operating limit in §63.7790(d)(2),

(i) Computing and recording the 30-day rolling average of the volatile organic compound emissions for each operating day according to the performance test procedures in §63.7824(e);

(ii) Recording the sampling date and time, sampling values, and sinter produced (tons/day); and

(iii) Maintaining the 30-day rolling average of volatile organic compound emissions no higher than 0.2 lb/ton of sinter produced.

(g) If the hourly average pressure drop or water flow rate for a venturi scrubber or hourly average opacity for an electrostatic precipitator exceeds the operating limit, you must follow the procedures in paragraphs (g)(1) through (4) of this section.

(1) You must initiate corrective action to determine the cause of the exceedance within 1 hour. During any period of corrective action, you must continue to monitor and record all required operating parameters for equipment that remains in operation. Within 24 hours of the exceedance, you must measure and record the hourly average operating parameter value for the emission unit on which corrective action was taken. If the hourly average parameter value meets the applicable operating limit, then the corrective action was successful and the emission unit is in compliance with the applicable operating limit.

(2) If the initial corrective action required in paragraph (g)(1) of this section was not successful, you must complete additional corrective action within the next 24 hours (48 hours from the time of the exceedance). During any period of corrective action, you must continue to monitor and record all required operating parameters for equipment that remains in operation. After this second 24-hour period, you must again measure and record the hourly average operating parameter value for the emission unit on which corrective action was taken. If the hourly average parameter value meets the applicable operating limit, then the corrective action was successful and the emission unit is in compliance with the applicable operating limit.

(3) For purposes of paragraphs (g)(1) and (2) of this section, in the case of an exceedance of the hourly average opacity operating limit for an electrostatic precipitator, measurements of the hourly average opacity based on visible

emission observations in accordance with Method 9 (40 CFR part 60, appendix A) may be taken to evaluate the effectiveness of corrective action.

(4) If the second attempt at corrective action required in paragraph (g)(2) of this section was not successful, you must report the exceedance as a deviation in your next semiannual compliance report according to §63.7841(b).

[68 FR 27663, May 20, 2003, as amended at 71 FR 39587, July 13, 2006]

§ 63.7834 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?

(a) For each capture system and control device subject to an operating limit in §63.7790(b), you must demonstrate continuous compliance with the operation and maintenance requirements in §63.7800(b) by meeting the requirements of paragraphs (a)(1) through (4) of this section:

(1) Making monthly inspections of capture systems and initiating corrective action according to §63.7800(b)(1) and recording all information needed to document conformance with these requirements;

(2) Performing preventative maintenance according to §63.7800(b)(2) and recording all information needed to document conformance with these requirements;

(3) Initiating and completing corrective action for a baghouse equipped with a bag leak detection system or COMS according to §63.7800(b)(4) and recording all information needed to document conformance with these requirements, including the time you initiated corrective action, the corrective action(s) taken, and date on which corrective action was completed.

(4) Initiating and completing corrective action for a venturi scrubber equipped with a CPMS or an electrostatic precipitator equipped with a COMS according to §63.7833(g) and recording all information needed to document conformance with these requirements, including the time you initiated corrective action, the corrective action(s) taken within the first 24 hours according to §63.7833(g)(1) and whether they were successful, the corrective action(s) taken within the second 24 hours according to §63.7833(g)(2) and whether they were successful, and the date on which corrective action was completed.

(b) You must maintain a current copy of the operation and maintenance plan required in §63.7800(b) onsite and available for inspection upon request. You must keep the plans for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39588, July 13, 2006]

§ 63.7835 What other requirements must I meet to demonstrate continuous compliance?

(a) *Deviations.* Except as provided in §63.7833(g), you must report each instance in which you did not meet each emission limitation in §63.7790 that applies to you. This includes periods of startup, shutdown, and malfunction. You also must report each instance in which you did not meet each operation and maintenance requirement in §63.7800 that applies to you. These instances are deviations from the emission limitations and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements in §63.7841.

(b) *Startups, shutdowns, and malfunctions.* (1) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.6(e)(1).

(2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

[68 FR 27663, May 20, 2003, as amended at 71 FR 20468, Apr. 20, 2006; 71 FR 39588, July 13, 2006]

Notifications, Reports, and Records

§ 63.7840 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e) and (f)(4), and 63.9(b) through (h) that apply to you by the specified dates.

(b) As specified in §63.9(b)(2), if you startup your affected source before May 20, 2003, you must submit your initial notification no later than September 17, 2003.

(c) As specified in §63.9(b)(3), if you start your new affected source on or after May 20, 2003, you must submit your initial notification no later than 120 calendar days after you become subject to this subpart.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in §63.7(b)(1).

(e) If you are required to conduct a performance test, opacity observation, or other initial compliance demonstration, you must submit a notification of compliance status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration that does not include a performance test, you must submit the notification of compliance status before the close of business on the 30th calendar day following completion of the initial compliance demonstration.

(2) For each initial compliance demonstration that does include a performance test, you must submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to §63.10(d)(2).

§ 63.7841 What reports must I submit and when?

(a) *Compliance report due dates.* Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements in paragraphs (a)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7783 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your source in §63.7783.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after your first compliance report is due.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (a)(1) through (4) of this section.

(b) *Compliance report contents.* Each compliance report must include the information in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (8) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there were no deviations from the continuous compliance requirements in §§63.7833 and 63.7834 that apply to you, a statement that there were no deviations from the emission limitations or operation and maintenance requirements during the reporting period.

(6) If there were no periods during which a continuous monitoring system (including a CPMS, COMS, or continuous emission monitoring system (CEMS) was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

(7) For each deviation from an emission limitation in §63.7790 that occurs at an affected source where you are not using a continuous monitoring system (including a CPMS, COMS, or CEMS) to comply with an emission limitation in this subpart, the compliance report must contain the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(7)(i) and (ii) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The total operating time of each affected source during the reporting period.

(ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable and the corrective action taken.

(8) For each deviation from an emission limitation occurring at an affected source where you are using a continuous monitoring system (including a CPMS or COMS) to comply with the emission limitation in this subpart, you must include the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(8)(i) through (xi) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The date and time that each malfunction started and stopped.

(ii) The date and time that each continuous monitoring was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous monitoring system was out-of-control as specified in §63.8(c)(7), including the information in §63.8(c)(8).

(iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(v) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(vi) A breakdown of the total duration of the deviations during the reporting period including those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.

(viii) A brief description of the process units.

(ix) A brief description of the continuous monitoring system.

(x) The date of the latest continuous monitoring system certification or audit.

(xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

(c) *Immediate startup, shutdown, and malfunction report.* If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements in §63.10(d)(5)(ii).

(d) *Part 70 monitoring report.* If you have obtained a title V operating permit for an affected source pursuant to 40 CFR part 70 or 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emission limitation or operation and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements for an affected source to your permitting authority.

§ 63.7842 What records must I keep?

(a) You must keep the following records:

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, performance evaluations, and opacity observations as required in §63.10(b)(2)(viii).

(b) For each COMS, you must keep the records specified in paragraphs (b)(1) through (4) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Monitoring data for a performance evaluation as required in §63.6(h)(7)(i) and (ii).

(3) Previous (that is, superceded) versions of the performance evaluation plan as required in §63.8(d)(3).

(4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(c) You must keep the records required in §63.6(h)(6) for visual observations.

(d) You must keep the records required in §§63.7833 and 63.7834 to show continuous compliance with each emission limitation and operation and maintenance requirement that applies to you.

§ 63.7843 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to §63.10(b)(1). You can keep the records offsite for the remaining 3 years.

Other Requirements and Information

§ 63.7850 What parts of the General Provisions apply to me?

Table 4 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§ 63.7851 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the United States Environmental Protection Agency (U.S. EPA), or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternative opacity emission limits in Table 1 to this subpart under §63.6(h)(9).

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90, except for approval of an alternative method for the oil content of the sinter plant feedstock or volatile organic compound measurements for the sinter plant windbox exhaust stream stack as provided in §63.7824(f).

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39588, July 13, 2006]

§ 63.7852 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in §63.2, and in this section as follows.

Bag leak detection system means a system that is capable of continuously monitoring relative particulate matter (dust) loadings in the exhaust of a baghouse to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on tribroelectric, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

Basic oxygen process furnace means any refractory-lined vessel in which high-purity oxygen is blown under pressure through a bath of molten iron, scrap metal, and fluxes to produce steel. This definition includes both top and bottom blown furnaces, but does not include argon oxygen decarburization furnaces.

Basic oxygen process furnace shop means the place where steelmaking operations that begin with the transfer of molten iron (hot metal) from the torpedo car and end prior to casting the molten steel, including hot metal transfer, desulfurization, slag skimming, refining in a basic oxygen process furnace, and ladle metallurgy occur.

Basic oxygen process furnace shop ancillary operations means the processes where hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy occur.

Blast furnace means a furnace used for the production of molten iron from iron ore and other iron bearing materials.

Bottom-blown furnace means any basic oxygen process furnace in which oxygen and other combustion gases are introduced into the bath of molten iron through tuyeres in the bottom of the vessel or through tuyeres in the bottom and sides of the vessel.

Casthouse means the building or structure that encloses the bottom portion of a blast furnace where the hot metal and slag are tapped from the furnace.

Certified observer means a visible emission observer certified to perform EPA Method 9 opacity observations.

Desulfurization means the process in which reagents such as magnesium, soda ash, and lime are injected into the hot metal, usually with dry air or nitrogen, to remove sulfur.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation (including operating limits) or operation and maintenance requirement;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Discharge end means the place where those operations conducted within the sinter plant starting at the discharge of the sintering machine's traveling grate including (but not limited to) hot sinter crushing, screening, and transfer operations occur.

Emission limitation means any emission limit, opacity limit, or operating limit.

Hot metal transfer station means the location in a basic oxygen process furnace shop where molten iron (hot metal) is transferred from a torpedo car or hot metal car used to transport hot metal from the blast furnace casthouse to a holding vessel or ladle in the basic oxygen process furnace shop. This location also is known as the reladling station or ladle transfer station.

Integrated iron and steel manufacturing facility means an establishment engaged in the production of steel from iron ore.

Ladle metallurgy means a secondary steelmaking process that is performed typically in a ladle after initial refining in a basic oxygen process furnace to adjust or amend the chemical and/or mechanical properties of steel. This definition does not include vacuum degassing.

Primary emissions means particulate matter emissions from the basic oxygen process furnace generated during the steel production cycle which are captured and treated in the furnace's primary emission control system.

Primary emission control system means the combination of equipment used for the capture and collection of primary emissions (*e.g.,* an open hood capture system used in conjunction with an electrostatic precipitator or a closed hood system used in conjunction with a scrubber).

Primary oxygen blow means the period in the steel production cycle of a basic oxygen process furnace during which oxygen is blown through the molten iron bath by means of a lance inserted from the top of the vessel (top-blown) or through tuyeres in the bottom and/or sides of the vessel (bottom-blown).

Responsible official means responsible official as defined in §63.2.

Secondary emissions means particulate matter emissions that are not controlled by a primary emission control system, including emissions that escape from open and closed hoods, lance hole openings, and gaps or tears in ductwork to the primary emission control system.

Secondary emission control system means the combination of equipment used for the capture and collection of secondary emissions from a basic oxygen process furnace.

Sinter cooler means the apparatus used to cool the hot sinter product that is transferred from the discharge end through contact with large volumes of induced or forced draft air.

Sinter plant means the machine used to produce a fused clinker-like aggregate or sinter of fine iron-bearing materials suited for use in a blast furnace. The machine is composed of a continuous traveling grate that conveys a bed of ore fines and other finely divided iron-bearing material and fuel (typically coke breeze), a burner at the feed end of the grate for ignition, and a series of downdraft windboxes along the length of the strand to support downdraft combustion and heat sufficient to produce a fused sinter product.

Skimming station means the locations inside a basic oxygen process furnace shop where slag is removed from the top of the molten metal bath.

Steel production cycle means the operations conducted within the basic oxygen process furnace shop that are required to produce each batch of steel. The following operations are included: scrap charging, preheating (when done), hot metal charging, primary oxygen blowing, sampling, (vessel turndown and turnup), additional oxygen blowing (when done), tapping, and deslagging. The steel production cycle begins when the scrap is charged to the furnace and ends after the slag is emptied from the vessel into the slag pot.

Top-blown furnace means any basic oxygen process furnace in which oxygen is introduced into the bath of molten iron by means of an oxygen lance inserted from the top of the vessel.

Windboxes means the compartments that provide for a controlled distribution of downdraft combustion air as it is drawn through the sinter bed of a sinter plant to make the fused sinter product.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39588, July 13, 2006]

Table 1 to Subpart FFFFF of Part 63—Emission and Opacity Limits

As required in §63.7790(a), you must comply with each applicable emission and opacity limit in the following table:

For . . .	You must comply with each of the following . . .
1. Each windbox exhaust stream at an existing sinter plant	You must not cause to be discharged to the atmosphere any gases that contain particulate matter in excess of 0.4 lb/ton of product sinter.
3. Each discharge end at an existing sinter plant	a. You must not cause to be discharged to the atmosphere any gases that exit from one or more control devices that contain, on a flow-weighted basis, particulate matter in excess of 0.02 gr/dscf[1][2]; and b. You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the building or structure housing the discharge end that exhibit opacity greater than 20 percent (6-minute average).
5. Each sinter cooler at an existing sinter plant	You must not cause to be discharged to the atmosphere any emissions that exhibit opacity greater than 10 percent (6-minute average).

[1]This limit applies if the cooler is vented to the same control device as the discharge end.
[2]This concentration limit (gr/dscf) for a control device does not apply to discharges inside a building or structure housing the discharge end at an existing sinter plant, inside a casthouse at an existing blast furnace, or inside an existing BOPF shop if the control device was installed before August 30, 2005.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39588, July 13, 2006]

Table 2 to Subpart FFFFF of Part 63—Initial Compliance with Emission and Opacity Limits

As required in §63.7825(a)(1), you must demonstrate initial compliance with the emission and opacity limits according to the following table:

For . . .	You have demonstrated initial compliance if . . .
1. Each windbox exhaust stream at an existing sinter plant	The process-weighted mass rate of particulate matter from a windbox exhaust stream, measured according to the performance test procedures in §63.7822(c), did not exceed 0.4 lb/ton of product sinter.
3. Each discharge end at an existing sinter plant	a. The flow-weighted average concentration of particulate matter from one or more control devices applied to emissions from a discharge end, measured according to the performance test procedures in §63.7822(d), did not exceed 0.02 gr/dscf; and b. The opacity of secondary emissions from each discharge end, determined according to the performance test procedures in §63.7823(c), did not exceed 20 percent (6-minute average).
5. Each sinter cooler at an existing sinter plant	The opacity of emissions, determined according to the performance test procedures in §63.7823(e), did not exceed 10 percent (6-minute average).

[68 FR 27663, May 20, 2003, as amended at 71 FR 39589, July 13, 2006]

Table 3 to Subpart FFFFF of Part 63—Continuous Compliance With Emission and Opacity Limits

As required in §63.7833(a), you must demonstrate continuous compliance with the emission and opacity limits according to the following table:

For . . .	You must demonstrate continuous compliance by . . .
1. Each windbox exhaust stream at an existing sinter plant	a. Maintaining emissions of particulate matter at or below 0.4 lb/ton of product sinter; and b. Conducting subsequent performance tests at the frequencies specified in §63.7821.
3. Each discharge end at an existing sinter plant	a. Maintaining emissions of particulate matter from one or more control devices at or below 0.02 gr/dscf; and b. Maintaining the opacity of secondary emissions that exit any opening in the building or structure housing the discharge end at or below 20 percent (6-minute average); and c. Conducting subsequent performance tests at the frequencies specified in §63.7821.
5. Each sinter cooler at an existing sinter plant	a. Maintaining the opacity of emissions that exit any sinter cooler at or below 10 percent (6-minute average); and b. Conducting subsequent performance tests at the frequencies specified in §63.7821.

[71 FR 39590, July 13, 2006]

Table 4 to Subpart FFFFF of Part 63—Applicability of General Provisions to Subpart FFFFF

As required in §63.7850, you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) shown in the following table:

Citation	Subject	Applies to Subpart FFFFF	Explanation
§63.1	Applicability	Yes.	
§63.2	Definitions	Yes.	
§63.3	Units and Abbreviations	Yes.	
§63.4	Prohibited Activities	Yes.	
§63.5	Construction/Reconstruction	Yes.	
§63.6(a), (b), (c), (d), (e), (f), (g), (h)(2)(ii)–(h)(9)	Compliance with Standards and Maintenance Requirements	Yes.	

Citation	Subject	Applies to Subpart FFFFF	Explanation
§63.6(h)(2)(i)	Determining Compliance with Opacity and VE Standards	No	Subpart FFFFF specifies methods and procedures for determining compliance with opacity emission and operating limits.
§63.6(i)	Extension of Compliance with Emission Standards	Yes	
§63.6(j)	Exemption from Compliance with Emission Standards	Yes	
§63.7(a)(1)–(2)	Applicability and Performance Test Dates	No	Subpart FFFFF and specifies performance test applicability and dates.
§63.7(a)(3), (b), (c)–(h)	Performance Testing Requirements	Yes	
§63.8(a)(1)–(3), (b), (c)(1)–(3), (c)(4)(i)–(ii), (c)(5)–(6), (c)(7)–(8), (f)(1)–(5), (g)(1)–(4)	Monitoring Requirements	Yes	CMS requirements in §§63.8(c)(4)(i)–(ii), (c)(5)–(6), (d), and (e) apply only to COMS.
§63.8(a)(4)	Additional Monitoring Requirements for Control Devices in §63.11	No	Subpart FFFFF does not require flares.
§63.8(c)(4)	Continuous Monitoring System Requirements	No	Subpart FFFFF specifies requirements for operation of CMS.
§63.8(f)(6)	RATA Alternative	No	
§63.8(g)(5)	Data Reduction	No	Subpart FFFFF specifies data reduction requirements.
§63.9	Notification Requirements	Yes	Additional notifications for CMS in §63.9(g) apply only to COMS.
§63.10(a), (b)(1), (b)(2)(i)–(xii), (b)(2)(xiv), (b)(3), (c)(1)–(6), (c)(9)–(15), (d), (e)(1)–(2), (e)(4), (f)	Recordkeeping and Reporting Requirements	Yes	Additional records for CMS in §63.10(c)(1)–(6), (9)–(15), and reports in §63.10(d)(1)–(2) apply only to COMS.
§63.10(b)(2) (xiii)	CMS Records for RATA Alternative	No	
§63.10(c)(7)–(8)	Records of Excess Emissions and Parameter Monitoring Exceedances for CMS	No	Subpart FFFFF specifies record requirements.
§63.10(e)(3)	Excess Emission Reports	No	Subpart FFFFF specifies reporting requirements

Citation	Subject	Applies to Subpart FFFFF	Explanation
§63.11	Control Device Requirements	No	Subpart FFFFF does not require flares.
§63.12	State Authority and Delegations	Yes.	
§63.13–§63.15	Addresses, Incorporation by Reference, Availability of Information	Yes.	

[68 FR 27663, May 20, 2003, as amended at 71 FR 39591, July 13, 2006]

Section D.7 **Facility Operation Conditions**

Facility Description [326 IAC 2-7-5(15)]: Four (4) Blast Furnaces, designated as Blast Furnace No. 4, Blast Furnace No. 6, Blast Furnace No. 8 and Blast Furnace No. 14

(a) Raw materials shipped to the ore yard identified as IAOYO366, are transferred to the Highline, identified as IAHL0307, from which raw material shipments and coke are sent through the Stockhouse.

(b) The No. 14 Blast Furnace Stockhouse, constructed in 1979, modified in 2009 with the addition of a baghouse for particulate control, identified Blast Furnace No. 14 Stockhouse Baghouse, exhausting to stack IDSH0367, servicing Blast Furnace 14.

(c) The No 6 Blast Furnace Stockhouse constructed in 1979, controlled by dust suppression, services Blast Furnace No. 6. The No. 8 Blast Furnace Stockhouse constructed in 1979, controlled by dust suppression, services Blast Furnace No. 8.

(d) No. 4 Blast Furnace, constructed in 1917, with a maximum capacity of 200 tons per hour, identified as IABF0308, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using pulverized coal at a rate of 26 tons per hour, oil (from on-site contractor when it meets specifications) at a rate of 70 gallons per minute and/or coal tar (when the on-site contractor tar centrifuge is not operating) at a rate of 70 gallons per minute.

(1) Three (3) No. 4 Blast Furnace Stoves identified as IAST0360, replaced in 1947, with a maximum heat input capacity of 350 MMBtu per hour total combusting blast furnace gas (BFG) and natural gas, exhausting to the combustion stack IA6160.

(2) No. 4 Blast Furnace Casthouse, identified as IABF0308, constructed in 1917, with emissions from tapping and runners controlled by a natural gas iron oxide fume suppression system IA3177, exhausting to casthouse roof monitor IA6010.

(3) One (1) Slag Pit, identified as IASP0311, with fugitive emissions.

(e) No. 6 Blast Furnace, constructed in 1910, with a maximum capacity of 200 tons per hour, identified as IBBFO341, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using pulverized coal injected at a rate of 26 tons per hour, oil at a rate of 70 gallons per minute and/or coal tar at a rate of 70 gallons per minute.

(1) Four (4) No. 6 Blast Furnace Stoves identified as IBST0361, replaced in 1997, with a maximum heat input capacity of 350 MMBtu per hour total, combusting Blast Furnace Gas (BFG) and natural gas exhausting to the combustion stack IB6168.

(2) No. 6 Blast Furnace Casthouse, identified as IBBF0341, constructed in 1910, with emissions from tapping and runners controlled by a natural gas iron oxide fume suppression system IB3178, exhausting to casthouse roof monitor IB6011.

(3) One (1) Slag Pit, identified as IBSP0335, with fugitive emissions.

(f) No. 8 Blast Furnace, constructed in 1909, with a maximum capacity of 183 tons per hour, identified as ICBFO354, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using pulverized coal injected at a rate of 26 ton per hour, oil at a rate of 70 gallons per minute and /or coal tar at a rate of 70 gallons per minute.

(1) Four (4) No. 8 Blast Furnace Stoves, identified as ICST0362, replaced in 1999, with a maximum heat input capacity of 325 MMBtu per hour total, combusting Blast Furnace Gas and natural gas, exhausting to the combustion stack IC6175.

(2) No. 8 Blast Furnace Casthouse, identified as ICBF0354, constructed in 1909, with emissions from tapping and runners controlled by a natural gas iron oxide fume suppression system IC3179, exhausting to cast house roof monitor IC6012.

(3) One (1) Slag Pit, identified as ICSP0363, with fugitive emissions.

(g) No. 14 Blast Furnace, constructed in 1974, with a maximum capacity of 450 tons per hour, identified as IDBF0369, using a Blast Furnace Gas Distribution System to collect the blast furnace gas and using pulverized coal injected at a rate of 80 tons per hour, oil at a rate of 150 gallons per minute and/or coal tar at a rate of 150 gallons per minute.

(1) Three (3) No. 14 Blast Furnace Stoves identified as IDST0359, constructed in 1974, with a maximum heat input capacity of 700 MMBtu per hour total, combusting blast furnace gas and natural gas, exhausting to the combustion stack ID6184.

(2) No. 14 Blast Furnace Casthouse, identified as IDBF0369, constructed in 1974 with emissions controlled by a baghouse, identified as ID3185, exhausting to stack ID6187 and fugitive emissions exhausting through the casthouse roof monitor ID6013;

(3) One (1) Slag Pit, identified as IDSP0371, with fugitive emissions.

(4) Pursuant to Significant Source Modification 089-20118-00121, issued October 20, 2005, the following activities involved in the No. 14 Blast Furnace Reline Project were approved for construction:

(A) Replacement of furnace refractory lining with new and thinner refractory brick.

(B) Replacement of furnace shell.

(C) Removal and replacement of the top charging system with a new “bell-less” charging system.

(D) Placement of new copper staves in the mantle area of the furnace.

(E) Installation of copper cooling plates and a new bustle pipe.

(F) Repair of the checker work brick in the stoves and various structural, mechanical and electrical repairs.

(G) Enlargement of the slag granulator and addition of a stack.

(H) Changes to the casthouse and casthouse emissions control system to improve capture efficiency of hoods at the tap holes, iron troughs and runners.

(I) Removal and replacement of the existing system for cleaning blast furnace gas with a more efficient scrubbing system.

(h) One (1) No. 14 Blast Furnace Slag Granulation Plant owned by U.S. Steel -Gary Works and operated by U.S. Steel - Gary Works as part of the slag processing operation. The granulation plant has a maximum capacity of 1,704,000 tons of steel mill slag per year, consisting of the following:

(1) One (1) hot slag quenching operation, constructed in 1991, directed to a hooded exhaust stack.

(2) Two (2) silos, constructed in 1991, for temporary slag storage.

(3) Two (2) belt conveyers, constructed in January 1995.

(4) One (1) storage silo and loadout bay, constructed in May 1995, with a capacity of 400,000 tons per year.

(i) One (1) blast furnace gas distribution system consisting of instrumentation and valves designed to limit the maximum pressure through the distribution system by venting excess blast furnace gas to the three (3) bleeder stacks equipped with Flare No. 1 identified as BG6073, constructed before 1920, Flare No. 2, identified as BG6074 constructed before 1920 and Flare No. 4 identified as BG6075, constructed in 1974.

(j) One (1) iron beaching process, constructed prior to 1965, identified as IMIB0378.

(k) One (1) transfer ladle maintenance operation, constructed prior to 1965, identified as, IMVM0375.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Emission Offset Minor Limitation [326 IAC 2-3]

Pursuant to Construction Permit 089-2936-00133, issued July 2, 1993 and 326 IAC 2-3 (Emission Offset), the total granulation plant throughput shall not exceed 1,704,000 tons per 12 consecutive month period with compliance demonstrated at the end of each month. Therefore, the emission offset rule 326 IAC 2-3 does not apply.

D.7.2 PSD Minor Limit PM/PM_{10} [326 IAC 2-2]

In order render the requirements of PSD (Prevention of Significant Deterioration) not applicable for PM and PM_{10}, the Blast Furnace No. 14 Stockhouse Baghouse shall achieve 90% capture efficiency and the exhaust from stack IDSH0367 shall not exceed 2.57 lbs of PM per hour and 2.57 lbs of PM_{10} per hour.

Compliance with these limits will ensure that the PM and PM_{10} emissions increase from the modification permitted in Significant Permit Modification 089-27690-00121 shall be less than twenty-five (25) and fifteen (15) tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable to this modification.

D.7.3 Nonattainment New Source Review (NSR) Minor Limit [326 IAC 2-1.1-5]

In order render the requirements of Nonattainment NSR not applicable for $PM_{2.5}$, the Blast Furnace No. 14 Stockhouse Baghouse shall achieve 90% capture efficiency and the exhaust from stack IDSH0367 shall not exceed 2.19 lbs of $PM_{2.5}$ per hour.

Compliance with this limit will ensure that the $PM_{2.5}$ emissions increase from the modification permitted in Significant Permit Modification 089-27690-00121 shall be less than ten (10) tons per

year and shall render the requirements of 326 IAC 2-1.1-5-2 (Nonattainment New Source Review (NSR)) not applicable to this modification.

D.7.4 Particulate Emission Limitation [326 IAC 6.8-1-2(a)]

Pursuant to Construction Permit 089-1953-00133, issued March 18, 1991 and 326 IAC 6.8-1-2(a) (Particulate Matter Limitations for Lake County), the particulate matter emissions from the slag granulation process quenching hooded exhaust stack shall not exceed 0.03 grain per dry standard cubic foot (dscf).

D.7.5 General Provisions Relating to Hazardous Air Pollutants (HAPs) [326 IAC 20-1][40 CFR 63, Subpart A] [Table 4 to 40 CFR 63, Subpart FFFFF]

(a) The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the affected sources, the No. 4 Blast Furnace casthouse, No. 6 Blast Furnace casthouse, No. 8 Blast Furnace casthouse and No. 14 Blast Furnace casthouse, except when otherwise specified by Table 4 to 40 CFR 63, Subpart FFFFF.

D.7.6 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38]

Pursuant to 326 IAC 6.8-2-38, PM_{10} emissions shall comply with the following:

(a) The PM_{10} emissions from the Blast Furnace No. 4 stoves Stack IA6160 shall not exceed 0.033 pound per MMBtu of heat input and a total of 11.70 pounds per hour.

(b) The PM_{10} emissions from the Blast Furnace No. 6 stoves Stack IB6168 shall not exceed 0.033 pound per MMBtu of heat input and a total of 11.70 pounds per hour.

(c) The PM_{10} emissions from the Blast Furnace No. 8 stoves Stack IC6175 shall not exceed 0.033 pound per MMBtu of heat input and a total of 11.70 pounds per hour.

(d) The PM_{10} emissions from the Blast Furnace No. 14 stoves Stack ID6184 shall not exceed 0.029 pound per MMBtu of heat input and a total of 20.40 pounds per hour.

(e) The PM_{10} emissions from the Number 14 Blast Furnace Casthouse Baghouse Stack ID6187 shall not exceed 0.0090 grains per dry standard cubic feet and 38.57 pounds per hour.

(f) Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emissions limitations apply to one (1) stack serving the multiple units specified when the facility description notes stack serving, and to each stack of multiple stacks serving multiple facilities when the facility description notes each stack serving.

D.7.7 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3]

(a) Pursuant to 326 IAC 6-4-2:

(1) The iron beaching and ladle maintenance generating fugitive dust shall be in violation of this rule (326 IAC 6-4) if any of the following criteria are violated:

(A) A source or combination of sources which cause to exist fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations as determined by the following formula:

$$P = \frac{100 (R) - U)}{U}$$

Where

P = Percentage increase
R = Number of particles of fugitive dust measured at downward receptor site
U = Number of particles of fugitive dust measured at upwind or background site

(B) The fugitive dust is comprised of fifty percent (50%) or more respirable dust, then the percent increase of dust concentration in subdivision (1) of this section shall be modified as follows:

$$PR = (1.5 \pm N)\ P$$

Where
N = Fraction of fugitive dust that is respirable dust;
PR = allowable percentage increase in dust concentration above background; and
P = no value greater than sixty-seven percent (67%).

(C) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.

(D) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subdivisions (1), (2) or (3) of this section. 326 IAC 6-4-2(4) is not federally enforceable.

(2) Pursuant to 326 IAC 6-4-6(6) (Exceptions), fugitive dust from a source caused by adverse meteorological conditions will be considered an exception to this rule (326 IAC 6-4) and therefore not in violation.

(b) Pursuant to 326 IAC 6.8-10-3 Lake County Fugitive Particulate Matter Emissions Limitations, fugitive emissions from iron beaching and ladle maintenance generating fugitive emissions shall comply with the emissions limitations in Section C.5 - Fugitive Dust Emissions.

(c) Pursuant to 326 IAC 6.8-10-3(7)(A), the PM_{10} emissions from Blast Furnace No. 14 Stockhouse Baghouse Stack IDSH0367 shall not exceed 0.022 grain per dry standard cubic foot (dscf) and ten percent (10%) opacity.

D.7.8 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20(a)(1)(I)(J) and (K)

(a) Pursuant to 326 IAC 7-4.1-20(a)(1)(I)(J), and (K), the SO_2 emissions from the No. 4 Blast Furnace Stoves IAST0360, No. 6 Blast Furnace Stoves IBST0361, No. 8 Blast Furnace Stoves ICST0362 and No. 14 Blast Furnace Stoves IDST0359 shall comply with the following when the coke oven gas desulfurization unit is not operating:

Furnace	Emission Limit lbs/MMBtu	Emission Limit lbs/hr
Blast Furnace No. 4 Stove Stack	0.115	40.25 total
Blast Furnace No. 6 Stove Stack	0.115	40.25 total
Blast Furnace No. 8 Stove Stack	0.115	37.38 total
Blast Furnace No. 14 Stove Stack during periods when combusting blast furnace gas	0.134	93.50 total

Furnace	Emission Limit lbs/MMBtu	Emission Limit lbs/hr
Blast Furnace No. 14 Casthouse Baghouse Stack during periods when Blast Furnace No. 14 Stoves are combusting blast furnace gas.	---	115.0

(b) Pursuant to 326 IAC 7-4.1-20(b)(5) and (9), the SO_2 emissions from the No. 4 Blast Furnace Stoves IAST0360, No. 6 Blast Furnace Stoves IBST0361, No. 8 Blast Furnace Stoves ICST0362 and No. 14 Blast Furnace Stoves IDST0359 shall comply with the following when the coke oven gas desulfurization unit is operating:

Furnace	Emission Limit lbs/MMBtu	Emission Limit lbs/hr
Blast Furnace No. 4 Stove Stack	0.115	40.25 total
Blast Furnace No. 6 Stove Stack	0.115	40.25 total
Blast Furnace No. 8 Stove Stack	0.115	37.38 total
Blast Furnace No. 14 Stove Stack	0.134	93.50 total
Blast Furnace No. 14 Casthouse Baghouse Stack	---	115.0

D.7.9 Carbon Monoxide (CO) Limitations [326 IAC 9-1-2(2)]

Pursuant to 326 IAC 9-1-2(2), no carbon monoxide shall be discharged from the No. 14 Blast Furnace IDBF0369, waste gas stream, unless the gas stream is burned in one of the following: a direct-flame afterburner, boiler or recuperative incinerator. In instances where carbon monoxide destruction is not required, carbon monoxide emissions shall be released at such elevation that the maximum ground level concentration from a single source shall not exceed twenty percent (20%) of the maximum ground one hour Indiana ambient air quality value for carbon monoxide.

D.7.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Preventive Maintenance Plan is required for these facilities and any associated control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.7.11 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) Not later than thirty (30) months after issuance of this permit (Permit No. T089-7663-00121) or two and one half (2 ½) years from the date of the most recent valid compliance demonstration which ever is earlier, in order to demonstrate compliance with Condition D.7.7, the Permittee shall perform PM_{10} testing on the No. 14 Blast Furnace Casthouse Baghouse Stack ID6187 using the appropriate methods to measure PM_{10} as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every two and one half (2 ½) years from the date of the most recent valid compliance demonstration.

(b) Not later than 60 days after achieving the maximum capacity but no later than 180 days after startup of Blast Furnace No. 14 Stockhouse Baghouse, in order to demonstrate compliance with Conditions D.7.2 and D.7.7(c), the Permittee shall perform PM, PM_{10}, and $PM_{2.5}$ testing on the Blast Furnace No. 14 Stockhouse Baghouse using methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance stack test.

(c) In lieu of performing the initial compliance tests for PM_{10} and $PM_{2.5}$ in accordance with the schedules set forth in Condition D.7.11(b), should the new or revised condensable PM test method(s) referenced in the U. S. EPA's Final Rule for Implementation of the New

Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5), signed on May 8, 2009, fail to be published at the time of the required PM_{10} and $PM_{2.5}$ testing, the Permittee may elect to test for PM_{10} and $PM_{2.5}$ within 180 after issuance of the new or revised condensable PM test method(s). Subsequent testing for PM_{10} and $PM_{2.5}$ shall not be effected by this condition and shall be performed in accordance with Conditions D.7.11(b).

(d) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation wtih regard to the performance testing required by this condition.

D.7.12 Sulfur Fuel Sampling and Analysis [326 IAC 7-4-1.1(d)]

To demonstrate compliance with condition D.7.9, the Permittee shall perform Sulfur Fuel Sampling and Analysis. Section C - Sulfur Fuel Sampling and Analysis contains the Permittee's obligation with regard to the sampling and analysis required by this condition.

D.7.13 Particulate Matter and CO Control [326 IAC 2-7-6(6)]

(a) Except as otherwise provided by statute, rule or this permit, the baghouses for particulate control shall be in operation and control emissions at all times the associated coal processing or drop point conveyors are in operation.

(1) Nos. 4, 6 and 8 Blast Furnace natural gas iron oxide fume suppression systems IA3177, IB3178, IC3179, shall be in operation in order minimize particulate matter emissions as follows:

(A) The iron and slag runners at the No. 4 Blast Furnace shall be equipped with a natural gas fired lance for fume suppression during the cast to minimize particulate matter emissions.

(B) The iron and slag runners at the No. 6 Blast Furnace shall be equipped with a natural gas fired lance for fume suppression during the cast to minimize particulate matter emissions.

(C) The iron and slag runners at the No. 8 Blast Furnace shall be equipped with a natural gas fired lance for fume suppression during the cast to minimize particulate matter emissions.

(2) The No. 14 blast furnace Casthouse Baghouse ID3185 shall be in operation at all times during casting operations at the No. 14 Blast Furnace Casthouse is in operation.

(3) The Blast Furnace No. 14 Stockhouse Baghouse shall be in operation at all times when material conveying and/or sizing operations at the Blast Furnace No. 14 Stockhouse are in operation.

(4) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

(b) Carbon Monoxide Emissions Control

The Blast Furnace Gas Distribution System Flare controls GC3629, GC3628 and GC3627 and bleeder stack Flare No. 1 BG6073, Flare No. 2 BG6074 and Flare No. 4 BG6075 shall be in operation and the pilot flame shall be present at all times when the No. 14 Blast Furnace, No. 4 Blast Furnace, No. 6 Blast Furnace and No. 8 Blast Furnace are in operation in order to minimize CO emissions.

D.7.14 Fugitive Dust Control

The dust suppression used as control for the fugitive particulate emissions from the granulation plant shall be applied as often as necessary to control fugitive dust.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

D.7.15 Visible Emissions Notations

(a) Visible emission notations of the No. 14 Blast Furnace Casthouse Baghouse Stack ID6187, Blast Furnace No. 14 Stockhouse Baghouse Stack IDSH0367, iron beaching, quenching hooded exhaust, transferring, conveying operations, and loadout bay shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation of this permit.

(f) The Permittee shall comply with the most current Continuous Compliance Plan visible emission evaluation program. Section C - Continuous Compliance Plan contains the Permittee's obligation with regard to the visible emission evaluation program required by this condition.

D.7.16 Parametric Monitoring

(a) The Permittee shall record the pressure drop across the No. 14 Blast Furnace Cast house baghouse ID3185, at least once per day when the No. 14 Blast Furnace Casthouse is in operation. When for any one reading, the pressure drop across the baghouses is outside the normal range of 3 to 9 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions and Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation of this permit.

(b) The Permittee shall record the pressure drop across the Blast Furnace No. 14 Stockhouse Baghouse, at least once per day when the No. 14 Blast Furnace Stockhouse processes are in operation. When for any one reading, the pressure drop across the baghouses is outside the normal range of 3 to 9 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response. Section C -

Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation of this permit.

(c) The Permittee shall comply with the most current Continuous Compliance Plan for the baghouse operation, recording and maintenance. Section C - Continuous Compliance Plan contains the Permittee's obligation with regard to the baghouse operation, recording and maintenance required by this condition.

(d) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.17 General Record Keeping Requirements

(a) To document the compliance status with Condition D.7.1, the Permittee shall maintain records at the plant of the total tons of slag processed in the granulation plant per twelve (12) consecutive month period.

(b) To document the compliance status with Condition D.7.8, the Permittee shall maintain records in accordance with Section C – Sulfur Dioxide SO_2 Record Keeping (Entire Source).

(c) To document the compliance status with Condition D.7.15, the Permittee shall maintain records of once per day visible emission notations of the No. 14 Casthouse Baghouse Stack (ID6187), the Blast Furnace No. 14 Stockhouse Baghouse exhaust stack (IDSH0367), the iron beaching facility, quenching hooded exhaust, transferring, conveying operations, and loadout bay when in operation. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(d) To document the compliance status with Condition D.7.16, the Permittee shall maintain the records of the once per day pressure drop of the No. 14 Casthouse Baghouse and the Blast Furnace No. 14 Stockhouse Baghouse during normal operation. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g. the process did not operate that day).

(e) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.7.18 General Reporting Requirements

A quarterly summary report to document the compliance status with condition D.7.1 and D.7.8 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

D.7.19 Actual to Projected Actual Applicability Test [326 IAC 2-2-2(d)] [326 IAC 2-2-3(c)]

(a) Pursuant to SSM 089-20118-00121, issued October 20, 2005, 326 IAC 2-2-2(d) and 326 IAC 2-3-2(c), the No. 14 Blast Furnace Reline Project shall not cause a significant net

emission increase for any of the pollutants listed in 326 IAC 2-2-1(xx) and 326 IAC 2-3-1(qq).

The significant net emission increase shall be determined using the Actual to Projected Actual Applicability Test.

Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-3 (Emission Offset) are not applicable.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented when the new or modified equipment begins normal operation.

(c) If there is a reasonable possibility that the No. 14 Blast Furnace Reline Project may result in a significant emission increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and 326 IAC 2-3-1 (mm)), the Permittee shall comply with the following:

(1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and 326 IAC 2-3-1(ll)) at an existing emission unit, document and maintain the following records:

(A) A description of the project;

(B) Identification of any emission unit whose emissions of a regulated new source review (NSR) pollutant could be affected by the project;

(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:

(i) Baseline actual emissions;

(ii) Projected actual emissions;

(iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emission unit identified in (1)(B) above; and

(3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity or the potential to emit that regulated NSR pollutant at the emission unit.

D.7.20 Volatile Organic Compounds (VOC) De Minimis [326 IAC 2-3-2(b)]

Pursuant to SSM 089-20118-00121, issued October 20, 2005 and 326 IAC 2-3-2(b), the VOC emissions increases for the five (5) calendar year period January 2000 to December 2005 plus the net emission increase from the No. 14 Blast Furnace Reline Project resulted in an emission increase less than the VOC de minimis level (25 tons per year).

National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel manufacturing [40 CFR 63, Subpart FFFFF]

D.7.21 National Emissions Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel Manufacturing - Blast Furnaces [40 CFR 63, Subpart FFFFF]

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart FFFFF—National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities

Source: 68 FR 27663, May 20, 2003, unless otherwise noted.

What This Subpart Covers

§ 63.7780 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for integrated iron and steel manufacturing facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with all applicable emission limitations and operation and maintenance requirements in this subpart.

§ 63.7781 Am I subject to this subpart?

You are subject to this subpart if you own or operate an integrated iron and steel manufacturing facility that is (or is part of) a major source of hazardous air pollutants (HAP) emissions. Your integrated iron and steel manufacturing facility is a major source of HAP if it emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

§ 63.7782 What parts of my plant does this subpart cover?

(a) This subpart applies to each new and existing affected source at your integrated iron and steel manufacturing facility.

(b) The affected sources are each new or existing sinter plant, blast furnace, and basic oxygen process furnace (BOPF) shop at your integrated iron and steel manufacturing facility.

(c) This subpart covers emissions from the sinter plant windbox exhaust, discharge end, and sinter cooler; the blast furnace casthouse; and the BOPF shop including each individual BOPF and shop ancillary operations (hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy).

(d) A sinter plant, blast furnace, or BOPF shop at your integrated iron and steel manufacturing facility is existing if you commenced construction or reconstruction of the affected source before July 13, 2001.

(e) A sinter plant, blast furnace, or BOPF shop at your integrated iron and steel manufacturing facility is new if you commence construction or reconstruction of the affected source on or after July 13, 2001. An affected source is reconstructed if it meets the definition of reconstruction in §63.2.

§ 63.7783 When do I have to comply with this subpart?

(a) If you have an existing affected source, you must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to you by the dates specified in paragraphs (a)(1) and (2) of this section.

(1) No later than May 22, 2006 for all emissions sources at an existing affected source except for a sinter cooler at an existing sinter plant.

(2) No later than January 13, 2007 for a sinter cooler at an existing sinter plant.

(b) If you have a new affected source and its initial startup date is on or before May 20, 2003, then you must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to you by May 20, 2003.

(c) If you have a new affected source and its initial startup date is after May 20, 2003, you must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to you upon initial startup.

(d) If your integrated iron and steel manufacturing facility is not a major source and becomes a major source of HAP, the following compliance dates apply to you.

(1) Any portion of the existing integrated iron and steel manufacturing facility that becomes a new affected source or a new reconstructed source must be in compliance with this subpart upon startup.

(2) All other parts of the integrated iron and steel manufacturing facility must be in compliance with this subpart no later than 2 years after it becomes a major source.

(e) You must meet the notification and schedule requirements in §63.7840. Several of these notifications must be submitted before the compliance date for your affected source.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39585, July 13, 2006]

Emission Limitations

§ 63.7790 What emission limitations must I meet?

(a) You must meet each emission limit and opacity limit in Table 1 to this subpart that applies to you.

(b) You must meet each operating limit for capture systems and control devices in paragraphs (b)(1) through (3) of this section that applies to you.

(1) You must operate each capture system applied to emissions from a sinter plant discharge end or blast furnace casthouse or to secondary emissions from a BOPF at or above the lowest value or settings established for the operating limits in your operation and maintenance plan;

(c) An owner or operator who uses an air pollution control device other than a baghouse, venturi scrubber, or electrostatic precipitator must submit a description of the device; test results collected in accordance with §63.7822 verifying the performance of the device for reducing emissions of particulate matter to the atmosphere to the levels required by this subpart; a copy of the operation and maintenance plan required in §63.7800(b); and appropriate operating parameters that will be monitored to maintain continuous compliance with the applicable emission limitation(s). The monitoring plan identifying the operating parameters to be monitored is subject to approval by the Administrator.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39585, July 13, 2006]

Operation and Maintenance Requirements

§ 63.7800 What are my operation and maintenance requirements?

(a) As required by §63.6(e)(1)(i), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.

(b) You must prepare and operate at all times according to a written operation and maintenance plan for each capture system or control device subject to an operating limit in §63.7790(b). Each plan must address the elements in paragraphs (b)(1) through (7) of this section.

(1) Monthly inspections of the equipment that is important to the performance of the total capture system (*e.g.,* pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (*e.g.,* presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in the ductwork, and fan erosion). The operation and maintenance plan also must include requirements to repair any defect or deficiency in the capture system before the next scheduled inspection.

(2) Preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

(3) Operating limits for each capture system applied to emissions from a sinter plant discharge end or blast furnace casthouse, or to secondary emissions from a BOPF. You must establish the operating limits according to the requirements in paragraphs (b)(3)(i) through (iii) of this section.

(i) Select operating limit parameters appropriate for the capture system design that are representative and reliable indicators of the performance of the capture system. At a minimum, you must use appropriate operating limit parameters that indicate the level of the ventilation draft and the damper position settings for the capture system when operating to collect emissions, including revised settings for seasonal variations. Appropriate operating limit parameters for ventilation draft include, but are not limited to, volumetric flow rate through each separately ducted hood, total volumetric flow rate at the inlet to the control device to which the capture system is vented, fan motor amperage, or static pressure.

(ii) For each operating limit parameter selected in paragraph (b)(3)(i) of this section, designate the value or setting for the parameter at which the capture system operates during the process operation. If your operation allows for more than one process to be operating simultaneously, designate the value or setting for the parameter at which the capture system operates during each possible configuration that you may operate.

(iii) Include documentation in your plan to support your selection of the operating limits established for the capture system. This documentation must include a description of the capture system design, a description of the capture system operating during production, a description of each selected operating limit parameter, a rationale for why you chose the parameter, a description of the method used to monitor the parameter according to the requirements of §63.7830(a), and the data used to set the value or setting for the parameter for each of your process configurations.

(4) Corrective action procedures for baghouses equipped with bag leak detection systems or continuous opacity monitoring systems (COMS). In the event a bag leak detection system alarm is triggered or emissions from a baghouse equipped with a COMS exceed an hourly average opacity of 5 percent, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Corrective actions may include, but are not limited to:

(i) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media or otherwise repairing the control device.

(iv) Sealing off a defective baghouse compartment.

(v) Cleaning the bag leak detection system probe, or otherwise repair the bag leak detection system.

(vi) Shutting down the process producing the particulate emissions.

(5) Corrective action procedures for venturi scrubbers equipped with continuous parameter monitoring systems (CPMS). In the event a venturi scrubber exceeds the operating limit in §63.7790(b)(2), you must take corrective actions consistent with your site-specific monitoring plan in accordance with §63.7831(a).

(6) Corrective action procedures for electrostatic precipitators equipped with COMS. In the event an electrostatic precipitator exceeds the operating limit in §63.7790(b)(3), you must take corrective actions consistent with your site-specific monitoring plan in accordance with §63.7831(a).

(7) Procedures for determining and recording the daily sinter plant production rate in tons per hour.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39585, July 13, 2006]

General Compliance Requirements

§ 63.7810 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in §63.2.

(b) During the period between the compliance date specified for your affected source in §63.7783 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(c) You must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3).

[68 FR 27663, May 20, 2003, as amended at 71 FR 20468, Apr. 20, 2006]

Initial Compliance Requirements

§ 63.7820 By what date must I conduct performance tests or other initial compliance demonstrations?

(a) You must conduct a performance test to demonstrate initial compliance with each emission and opacity limit in Table 1 to this subpart that applies to you. You must also conduct a performance test to demonstrate initial compliance with the 30-day rolling average operating limit for the oil content of the sinter plant feedstock in §63.7790(d)(1) or alternative limit for volatile organic compound emissions from the sinter plant windbox exhaust stream in §63.7790(d)(2). You must conduct the performance tests within 180 calendar days after the compliance date that is specified in §63.7783 for your affected source and report the results in your notification of compliance status.

(b) For each operation and maintenance requirement that applies to you where initial compliance is not demonstrated using a performance test or opacity observation, you must demonstrate initial compliance within 30 calendar days after the compliance date that is specified for your affected source in §63.7783.

(c) If you commenced construction or reconstruction between July 13, 2001 and May 20, 2003, you must demonstrate initial compliance with either the proposed emission limit or the promulgated emission limit no later than November 17, 2003 or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(d) If you commenced construction or reconstruction between July 13, 2001 and May 20, 2003, and you chose to comply with the proposed emission limit when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limit by November 17, 2006, or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

§ 63.7821 When must I conduct subsequent performance tests?

(a) You must conduct subsequent performance tests to demonstrate compliance with all applicable PM and opacity limits in Table 1 to this subpart at the frequencies specified in paragraphs (b) through (d) of this section.

(b) For each sinter cooler at an existing sinter plant and each emissions unit equipped with a control device other than a baghouse, you must conduct subsequent performance tests no less frequently than twice (at mid-term and renewal) during each term of your title V operating permit.

(c) For each emissions unit equipped with a baghouse, you must conduct subsequent performance tests no less frequently than once during each term of your title V operating permit.

(d) For sources without a title V operating permit, you must conduct subsequent performance tests every 2.5 years.

[71 FR 39586, July 13, 2006]

§ 63.7822 What test methods and other procedures must I use to demonstrate initial compliance with the emission limits for particulate matter?

(a) You must conduct each performance test that applies to your affected source according to the requirements in §63.7(e)(1) and the conditions detailed in paragraphs (b) through (i) of this section.

(b) To determine compliance with the applicable emission limit for particulate matter in Table 1 to this subpart, follow the test methods and procedures in paragraphs (b)(1) and (2) of this section.

(1) Determine the concentration of particulate matter according to the following test methods in appendix A to part 60 of this chapter:

(i) Method 1 to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 5, 5D, or 17, as applicable, to determine the concentration of particulate matter (front half filterable catch only).

(2) Collect a minimum sample volume of 60 dry standard cubic feet (dscf) of gas during each particulate matter test run. Three valid test runs are needed to comprise a performance test.

(e) For a control device applied to emissions from a blast furnace casthouse, sample for an integral number of furnace tapping operations sufficient to obtain at least 1 hour of sampling for each test run.

(i) Subject to approval by the permitting authority, you may conduct representative sampling of stacks when there are more than three stacks associated with a process.

§ 63.7823 What test methods and other procedures must I use to demonstrate initial compliance with the opacity limits?

(a) You must conduct each performance test that applies to your affected source according to the requirements in §63.7(h)(5) and the conditions detailed in paragraphs (b) through (d) of this section.

(b) You must conduct each visible emissions performance test such that the opacity observations overlap with the performance test for particulate matter.

(c) To determine compliance with the applicable opacity limit in Table 1 to this subpart for a sinter plant discharge end or a blast furnace casthouse:

(1) Using a certified observer, determine the opacity of emissions according to Method 9 in appendix A to part 60 of this chapter.

(2) Obtain a minimum of 30 6-minute block averages. For a blast furnace casthouse, make observations during tapping of the furnace. Tapping begins when the furnace is opened, usually by creating a hole near the bottom of the furnace, and ends when the hole is plugged.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39586, July 13, 2006]

§ 63.7824 What test methods and other procedures must I use to establish and demonstrate initial compliance with operating limits?

(a) For each capture system subject to an operating limit in §63.7790(b)(1), you must certify that the system operated during the performance test at the site-specific operating limits established in your operation and maintenance plan using the procedures in paragraphs (a)(1) through (4) of this section.

(1) Concurrent with all opacity observations, measure and record values for each of the operating limit parameters in your capture system operation and maintenance plan according to the monitoring requirements specified in §63.7830(a).

(2) For any dampers that are manually set and remain at the same position at all times the capture system is operating, the damper position must be visually checked and recorded at the beginning and end of each opacity observation period segment.

(3) Review and record the monitoring data. Identify and explain any times the capture system operated outside the applicable operating limits.

(4) Certify in your performance test report that during all observation period segments, the capture system was operating at the values or settings established in your capture system operation and maintenance plan.

(c) You may change the operating limits for a capture system or venturi scrubber if you meet the requirements in paragraphs (c)(1) through (3) of this section.

(1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate compliance with the applicable emission limitation in Table 1 to this subpart.

(3) Establish revised operating limits according to the applicable procedures in paragraphs (a) and (b) of this section for a control device or capture system.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39586, July 13, 2006]

§ 63.7825 How do I demonstrate initial compliance with the emission limitations that apply to me?

(a) For each affected source subject to an emission or opacity limit in Table 1 to this subpart, you have demonstrated initial compliance if:

(1) You meet the conditions in Table 2 to this subpart; and

(2) For each capture system subject to the operating limit in §63.7790(b)(1), you have established appropriate site-specific operating limit(s) and have a record of the operating parameter data measured during the performance test in accordance with §63.7824(a)(1); and

(c) For each emission limitation that applies to you, you must submit a notification of compliance status according to §63.7840(e).

[68 FR 27663, May 20, 2003, as amended at 71 FR 39586, July 13, 2006]

§ 63.7826 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

(a) For a capture system applied to emissions from a sinter plant discharge end or blast furnace casthouse or to secondary emissions from a BOPF, you have demonstrated initial compliance if you meet all of the conditions in paragraphs (a)(1) through (4) of this section.

(1) Prepared the capture system operation and maintenance plan according to the requirements of §63.7800(b), including monthly inspection procedures and detailed descriptions of the operating parameter(s) selected to monitor the capture system;

(2) Certified in your performance test report that the system operated during the test at the operating limits established in your operation and maintenance plan;

(3) Submitted a notification of compliance status according to the requirements in §63.7840(e), including a copy of the capture system operation and maintenance plan and your certification that you will operate the capture system at the values or settings established for the operating limits in that plan; and

(4) Prepared a site-specific monitoring plan according to the requirements in §63.7831(a).

(b) For each control device subject to operating limits in §63.7790(b)(2) or (3), you have demonstrated initial compliance if you meet all the conditions in paragraphs (b)(1) through (3) of this section.

(1) Prepared the control device operation and maintenance plan according to the requirements of §63.7800(b), including a preventative maintenance schedule and, as applicable, detailed descriptions of the corrective action procedures for baghouses and other control devices;

(2) Submitted a notification of compliance status according to the requirements in §63.7840(e), including a copy of the operation and maintenance plan; and

(3) Prepared a site-specific monitoring plan according to the requirements in §63.7831(a).

[68 FR 27663, May 20, 2003, as amended at 71 FR 39586, July 13, 2006]

Continuous Compliance Requirements

§ 63.7830 What are my monitoring requirements?

(a) For each capture system subject to an operating limit in §63.7790(b)(1) established in your capture system operation and maintenance plan, you must install, operate, and maintain a CPMS according to the requirements in §63.7831(e) and the requirements in paragraphs (a)(1) through (3) of this section.

(1) Dampers that are manually set and remain in the same position are exempt from the requirement to install and operate a CPMS. If dampers are not manually set and remain in the same position, you must make a visual check at least once every 24 hours to verify that each damper for the capture system is in the same position as during the initial performance test.

(b) Except as provided in paragraph (b)(3) of this section, you must meet the requirements in paragraph (b)(1) or (2) of this section for each baghouse applied to meet any particulate emission limit in Table 1 to this subpart. You must conduct inspections of each baghouse according to the requirements in paragraph (b)(4) of this section.

(1) Install, operate, and maintain a bag leak detection system according to §63.7831(f) and monitor the relative change in particulate matter loadings according to the requirements in §63.7832; or

(2) If you do not install and operate a bag leak detection system, you must install, operate, and maintain a COMS according to the requirements in §63.7831(h) and monitor the hourly average opacity of emissions exiting each control device stack according to the requirements in §63.7832.

(3) A bag leak detection system and COMS are not required for a baghouse that meets the requirements in paragraphs (b)(3)(i) and (ii) of this section.

(i) The baghouse is a positive pressure baghouse and is not equipped with exhaust gas stacks; and

(ii) The baghouse was installed before August 30, 2005.

(4) You must conduct inspections of each baghouse at the specified frequencies according to the requirements in paragraphs (b)(4)(i) through (viii) of this section.

(i) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual.

(ii) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms.

(iii) Check the compressed air supply for pulse-jet baghouses each day.

(iv) Monitor cleaning cycles to ensure proper operation using an appropriate methodology.

(v) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means.

(vi) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or laying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices.

(vii) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks.

(viii) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39586, July 13, 2006]

§ 63.7831 What are the installation, operation, and maintenance requirements for my monitors?

(a) For each CPMS required in §63.7830, you must develop and make available for inspection upon request by the permitting authority a site-specific monitoring plan that addresses the requirements in paragraphs (a)(1) through (8) of this section.

(1) Installation of the CPMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.,* on or downstream of the last control device);

(2) Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system;

(3) Performance evaluation procedures and acceptance criteria (*e.g.,* calibrations);

(4) Ongoing operation and maintenance procedures in accordance with the general requirements of §§63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8);

(5) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d);

(6) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §§63.10(c), (e)(1), and (e)(2)(i);

(b) Unless otherwise specified, each CPMS must:

(1) Complete a minimum of one cycle of operation for each successive 15-minute period and collect a minimum of three of the required four data points to constitute a valid hour of data;

(2) Provide valid hourly data for at least 95 percent of every averaging period; and

(3) Determine and record the hourly average of all recorded readings.

(c) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(d) You must operate and maintain the CPMS in continuous operation according to the site-specific monitoring plan.

(e) For each capture system subject to an operating limit in §63.7790(b)(1), you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a) through (d) of this section.

(f) For each baghouse equipped with a bag leak detection system according to §63.7830(b)(1), you must install, operate, and maintain the bag leak detection system according to the requirements in paragraphs (f)(1) through (7) of this section.

(1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(2) The system must provide output of relative changes in particulate matter loadings.

(3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over a preset level. The alarm must be located such that it can be heard by the appropriate plant personnel.

(4) Each system that works based on the triboelectric effect must be installed, operated, and maintained in a manner consistent with the guidance document, “Fabric Filter Bag Leak Detection Guidance,” EPA–454/R–98–015,

September 1997. You may install, operate, and maintain other types of bag leak detection systems in a manner consistent with the manufacturer's written specifications and recommendations.

(5) To make the initial adjustment of the system, establish the baseline output by adjusting the sensitivity (range) and the averaging period of the device. Then, establish the alarm set points and the alarm delay time.

(6) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in your operation and maintenance plan. Do not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365-day period unless a responsible official certifies, in writing, that the baghouse has been inspected and found to be in good operating condition.

(7) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39587, July 13, 2006]

§ 63.7832 How do I monitor and collect data to demonstrate continuous compliance?

(a) Except for monitoring malfunctions, out-of-control periods as specified in §63.8(c)(7), associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times an affected source is operating.

(b) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels or to fulfill a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance.

(c) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

§ 63.7833 How do I demonstrate continuous compliance with the emission limitations that apply to me?

(a) You must demonstrate continuous compliance for each affected source subject to an emission or opacity limit in §63.7790(a) by meeting the requirements in Table 3 to this subpart.

(b) You must demonstrate continuous compliance for each capture system subject to an operating limit in §63.7790(b)(1) by meeting the requirements in paragraphs (b)(1) and (2) of this section.

(1) Operate the capture system at or above the lowest values or settings established for the operating limits in your operation and maintenance plan; and

(2) Monitor the capture system according to the requirements in §63.7830(a) and collect, reduce, and record the monitoring data for each of the operating limit parameters according to the applicable requirements of this subpart;

(c) For each baghouse applied to meet any particulate emission limit in Table 1 to this subpart, you must demonstrate continuous compliance by meeting the requirements in paragraph (c)(1) or (2) of this section as applicable, and paragraphs (c)(3) and (4) of this section:

(1) For a baghouse equipped with a bag leak detection system, operating and maintaining each bag leak detection system according to §63.7831(f) and recording all information needed to document conformance with these requirements. If you increase or decrease the sensitivity of the bag leak detection system beyond the limits specified in §63.7831(f)(6), you must include a copy of the required written certification by a responsible official in the next semiannual compliance report.

(2) For a baghouse equipped with a COMS, operating and maintaining each COMS and reducing the COMS data according to §63.7831(h).

(3) Inspecting each baghouse according to the requirements in §63.7830(b)(4) and maintaining all records needed to document conformance with these requirements.

(4) Maintaining records of the time you initiated corrective action in the event of a bag leak detection system alarm or when the hourly average opacity exceeded 5 percent, the corrective action(s) taken, and the date on which corrective action was completed.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39587, July 13, 2006]

§ 63.7834 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?

(a) For each capture system and control device subject to an operating limit in §63.7790(b), you must demonstrate continuous compliance with the operation and maintenance requirements in §63.7800(b) by meeting the requirements of paragraphs (a)(1) through (4) of this section:

(1) Making monthly inspections of capture systems and initiating corrective action according to §63.7800(b)(1) and recording all information needed to document conformance with these requirements;

(2) Performing preventative maintenance according to §63.7800(b)(2) and recording all information needed to document conformance with these requirements;

(3) Initiating and completing corrective action for a baghouse equipped with a bag leak detection system or COMS according to §63.7800(b)(4) and recording all information needed to document conformance with these requirements, including the time you initiated corrective action, the corrective action(s) taken, and date on which corrective action was completed.

(4) Initiating and completing corrective action for a venturi scrubber equipped with a CPMS or an electrostatic precipitator equipped with a COMS according to §63.7833(g) and recording all information needed to document conformance with these requirements, including the time you initiated corrective action, the corrective action(s) taken within the first 24 hours according to §63.7833(g)(1) and whether they were successful, the corrective action(s) taken within the second 24 hours according to §63.7833(g)(2) and whether they were successful, and the date on which corrective action was completed.

(b) You must maintain a current copy of the operation and maintenance plan required in §63.7800(b) onsite and available for inspection upon request. You must keep the plans for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39588, July 13, 2006]

§ 63.7835 What other requirements must I meet to demonstrate continuous compliance?

(a) *Deviations.* Except as provided in §63.7833(g), you must report each instance in which you did not meet each emission limitation in §63.7790 that applies to you. This includes periods of startup, shutdown, and malfunction. You also must report each instance in which you did not meet each operation and maintenance requirement in §63.7800 that applies to you. These instances are deviations from the emission limitations and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements in §63.7841.

(b) *Startups, shutdowns, and malfunctions.* (1) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.6(e)(1).

(2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

[68 FR 27663, May 20, 2003, as amended at 71 FR 20468, Apr. 20, 2006; 71 FR 39588, July 13, 2006]

Notifications, Reports, and Records

§ 63.7840 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e) and (f)(4), and 63.9(b) through (h) that apply to you by the specified dates.

(b) As specified in §63.9(b)(2), if you startup your affected source before May 20, 2003, you must submit your initial notification no later than September 17, 2003.

(c) As specified in §63.9(b)(3), if you start your new affected source on or after May 20, 2003, you must submit your initial notification no later than 120 calendar days after you become subject to this subpart.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in §63.7(b)(1).

(e) If you are required to conduct a performance test, opacity observation, or other initial compliance demonstration, you must submit a notification of compliance status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration that does not include a performance test, you must submit the notification of compliance status before the close of business on the 30th calendar day following completion of the initial compliance demonstration.

(2) For each initial compliance demonstration that does include a performance test, you must submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to §63.10(d)(2).

§ 63.7841 What reports must I submit and when?

(a) *Compliance report due dates.* Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements in paragraphs (a)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7783 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your source in §63.7783.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after your first compliance report is due.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (a)(1) through (4) of this section.

(b) *Compliance report contents.* Each compliance report must include the information in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (8) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there were no deviations from the continuous compliance requirements in §§63.7833 and 63.7834 that apply to you, a statement that there were no deviations from the emission limitations or operation and maintenance requirements during the reporting period.

(6) If there were no periods during which a continuous monitoring system (including a CPMS, COMS, or continuous emission monitoring system (CEMS) was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

(7) For each deviation from an emission limitation in §63.7790 that occurs at an affected source where you are not using a continuous monitoring system (including a CPMS, COMS, or CEMS) to comply with an emission limitation in this subpart, the compliance report must contain the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(7)(i) and (ii) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The total operating time of each affected source during the reporting period.

(ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable and the corrective action taken.

(8) For each deviation from an emission limitation occurring at an affected source where you are using a continuous monitoring system (including a CPMS or COMS) to comply with the emission limitation in this subpart, you must include the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(8)(i) through (xi) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The date and time that each malfunction started and stopped.

(ii) The date and time that each continuous monitoring was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous monitoring system was out-of-control as specified in §63.8(c)(7), including the information in §63.8(c)(8).

(iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(v) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(vi) A breakdown of the total duration of the deviations during the reporting period including those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.

(viii) A brief description of the process units.

(ix) A brief description of the continuous monitoring system.

(x) The date of the latest continuous monitoring system certification or audit.

(xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

(c) *Immediate startup, shutdown, and malfunction report.* If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements in §63.10(d)(5)(ii).

(d) *Part 70 monitoring report.* If you have obtained a title V operating permit for an affected source pursuant to 40 CFR part 70 or 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emission limitation or operation and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements for an affected source to your permitting authority.

§ 63.7842 What records must I keep?

(a) You must keep the following records:

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, performance evaluations, and opacity observations as required in §63.10(b)(2)(viii).

(b) For each COMS, you must keep the records specified in paragraphs (b)(1) through (4) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Monitoring data for a performance evaluation as required in §63.6(h)(7)(i) and (ii).

(3) Previous (that is, superceded) versions of the performance evaluation plan as required in §63.8(d)(3).

(4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(c) You must keep the records required in §63.6(h)(6) for visual observations.

(d) You must keep the records required in §§63.7833 and 63.7834 to show continuous compliance with each emission limitation and operation and maintenance requirement that applies to you.

§ 63.7843 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to §63.10(b)(1). You can keep the records offsite for the remaining 3 years.

Other Requirements and Information

§ 63.7850 What parts of the General Provisions apply to me?

Table 4 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§ 63.7851 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the United States Environmental Protection Agency (U.S. EPA), or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternative opacity emission limits in Table 1 to this subpart under §63.6(h)(9).

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90, except for approval of an alternative method for the oil content of the sinter plant feedstock or volatile organic compound measurements for the sinter plant windbox exhaust stream stack as provided in §63.7824(f).

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39588, July 13, 2006]

§ 63.7852 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in §63.2, and in this section as follows.

Bag leak detection system means a system that is capable of continuously monitoring relative particulate matter (dust) loadings in the exhaust of a baghouse to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on tribroelectric, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

Basic oxygen process furnace means any refractory-lined vessel in which high-purity oxygen is blown under pressure through a bath of molten iron, scrap metal, and fluxes to produce steel. This definition includes both top and bottom blown furnaces, but does not include argon oxygen decarburization furnaces.

Basic oxygen process furnace shop means the place where steelmaking operations that begin with the transfer of molten iron (hot metal) from the torpedo car and end prior to casting the molten steel, including hot metal transfer, desulfurization, slag skimming, refining in a basic oxygen process furnace, and ladle metallurgy occur.

Basic oxygen process furnace shop ancillary operations means the processes where hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy occur.

Blast furnace means a furnace used for the production of molten iron from iron ore and other iron bearing materials.

Bottom-blown furnace means any basic oxygen process furnace in which oxygen and other combustion gases are introduced into the bath of molten iron through tuyeres in the bottom of the vessel or through tuyeres in the bottom and sides of the vessel.

Casthouse means the building or structure that encloses the bottom portion of a blast furnace where the hot metal and slag are tapped from the furnace.

Certified observer means a visible emission observer certified to perform EPA Method 9 opacity observations.

Desulfurization means the process in which reagents such as magnesium, soda ash, and lime are injected into the hot metal, usually with dry air or nitrogen, to remove sulfur.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation (including operating limits) or operation and maintenance requirement;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Discharge end means the place where those operations conducted within the sinter plant starting at the discharge of the sintering machine's traveling grate including (but not limited to) hot sinter crushing, screening, and transfer operations occur.

Emission limitation means any emission limit, opacity limit, or operating limit.

Hot metal transfer station means the location in a basic oxygen process furnace shop where molten iron (hot metal) is transferred from a torpedo car or hot metal car used to transport hot metal from the blast furnace casthouse to a holding vessel or ladle in the basic oxygen process furnace shop. This location also is known as the reladling station or ladle transfer station.

Integrated iron and steel manufacturing facility means an establishment engaged in the production of steel from iron ore.

Ladle metallurgy means a secondary steelmaking process that is performed typically in a ladle after initial refining in a basic oxygen process furnace to adjust or amend the chemical and/or mechanical properties of steel. This definition does not include vacuum degassing.

Primary emissions means particulate matter emissions from the basic oxygen process furnace generated during the steel production cycle which are captured and treated in the furnace's primary emission control system.

Primary emission control system means the combination of equipment used for the capture and collection of primary emissions (*e.g.,* an open hood capture system used in conjunction with an electrostatic precipitator or a closed hood system used in conjunction with a scrubber).

Primary oxygen blow means the period in the steel production cycle of a basic oxygen process furnace during which oxygen is blown through the molten iron bath by means of a lance inserted from the top of the vessel (top-blown) or through tuyeres in the bottom and/or sides of the vessel (bottom-blown).

Responsible official means responsible official as defined in §63.2.

Secondary emissions means particulate matter emissions that are not controlled by a primary emission control system, including emissions that escape from open and closed hoods, lance hole openings, and gaps or tears in ductwork to the primary emission control system.

Secondary emission control system means the combination of equipment used for the capture and collection of secondary emissions from a basic oxygen process furnace.

Sinter cooler means the apparatus used to cool the hot sinter product that is transferred from the discharge end through contact with large volumes of induced or forced draft air.

Sinter plant means the machine used to produce a fused clinker-like aggregate or sinter of fine iron-bearing materials suited for use in a blast furnace. The machine is composed of a continuous traveling grate that conveys a bed of ore fines and other finely divided iron-bearing material and fuel (typically coke breeze), a burner at the feed end of the grate for ignition, and a series of downdraft windboxes along the length of the strand to support downdraft combustion and heat sufficient to produce a fused sinter product.

Skimming station means the locations inside a basic oxygen process furnace shop where slag is removed from the top of the molten metal bath.

Steel production cycle means the operations conducted within the basic oxygen process furnace shop that are required to produce each batch of steel. The following operations are included: scrap charging, preheating (when done), hot metal charging, primary oxygen blowing, sampling, (vessel turndown and turnup), additional oxygen blowing (when done), tapping, and deslagging. The steel production cycle begins when the scrap is charged to the furnace and ends after the slag is emptied from the vessel into the slag pot.

Top-blown furnace means any basic oxygen process furnace in which oxygen is introduced into the bath of molten iron by means of an oxygen lance inserted from the top of the vessel.

Windboxes means the compartments that provide for a controlled distribution of downdraft combustion air as it is drawn through the sinter bed of a sinter plant to make the fused sinter product.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39588, July 13, 2006]

Table 1 to Subpart FFFFF of Part 63—Emission and Opacity Limits

As required in §63.7790(a), you must comply with each applicable emission and opacity limit in the following table:

For . . .	You must comply with each of the following . . .
7. Each casthouse at an existing blast furnace	a. You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain particulate matter in excess of 0.01 gr/dscf[2]; and b. You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the casthouse or structure housing the blast furnace that exhibit opacity greater than 20 percent (6-minute average).
8. Each casthouse at a new blast furnace	a. You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain particulate matter in excess of 0.003 gr/dscf; and b. You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the casthouse or structure housing the blast furnace that exhibit opacity greater than 15 percent (6-minute average).

[1]This limit applies if the cooler is vented to the same control device as the discharge end.
[2]This concentration limit (gr/dscf) for a control device does not apply to discharges inside a building or structure housing the discharge end at an existing sinter plant, inside a casthouse at an existing blast furnace, or inside an existing BOPF shop if the control device was installed before August 30, 2005.
[3]This limit applies to control devices operated in parallel for a single BOPF during the oxygen blow.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39588, July 13, 2006]

Table 2 to Subpart FFFFF of Part 63—Initial Compliance with Emission and Opacity Limits

As required in §63.7825(a)(1), you must demonstrate initial compliance with the emission and opacity limits according to the following table:

For . . .	You have demonstrated initial compliance if . . .
7. Each casthouse at an existing blast furnace	a. The average concentration of particulate matter from a control device applied to emissions from a casthouse, measured according to the performance test procedures in §63.7822(e), did not exceed 0.01 gr/dscf; and b. The opacity of secondary emissions from each casthouse, determined according to the performance test procedures in §63.7823(c), did not exceed 20 percent (6-minute average).
8. Each casthouse at a new blast furnace	a. The average concentration of particulate matter from a control device applied to emissions from a casthouse, measured according to the performance test procedures in §63.7822(e), did not exceed 0.003 gr/dscf; and b. The opacity of secondary emissions from each casthouse, determined according to the performance test procedures in §63.7823(c), did not exceed 15 percent (6-minute average).

[68 FR 27663, May 20, 2003, as amended at 71 FR 39589, July 13, 2006]

Table 3 to Subpart FFFFF of Part 63—Continuous Compliance With Emission and Opacity Limits

As required in §63.7833(a), you must demonstrate continuous compliance with the emission and opacity limits according to the following table:

For . . .	You must demonstrate continuous compliance by . . .
7. Each casthouse at an existing blast furnace	a. Maintaining emissions of particulate matter from a control device at or below 0.01 gr/dscf; and b. Maintaining the opacity of secondary emissions that exit any opening in the casthouse or structure housing the casthouse at or below 20 percent (6-minute average); and c. Conducting subsequent performance tests at the frequencies specified in §63.7821.
8. Each casthouse at a new blast furnace	a. Maintaining emissions of particulate matter from a control device at or below 0.003 gr/dscf; and b. Maintaining the opacity of secondary emissions that exit any opening in the casthouse or structure housing the casthouse at or below 15 percent (6-minute average); and c. Conducting subsequent performance tests at the frequencies specified in §63.7821.

[71 FR 39590, July 13, 2006]

Table 4 to Subpart FFFFF of Part 63—Applicability of General Provisions to Subpart FFFFF

As required in §63.7850, you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) shown in the following table:

Citation	Subject	Applies to Subpart FFFFF	Explanation
§63.1	Applicability	Yes.	
§63.2	Definitions	Yes.	
§63.3	Units and Abbreviations	Yes.	
§63.4	Prohibited Activities	Yes.	
§63.5	Construction/Reconstruction	Yes.	
§63.6(a), (b), (c), (d), (e), (f), (g), (h)(2)(ii)–(h)(9)	Compliance with Standards and Maintenance Requirements	Yes.	

Citation	Subject	Applies to Subpart FFFFF	Explanation
§63.6(h)(2)(i)	Determining Compliance with Opacity and VE Standards	No	Subpart FFFFF specifies methods and procedures for determining compliance with opacity emission and operating limits.
§63.6(i)	Extension of Compliance with Emission Standards	Yes	
§63.6(j)	Exemption from Compliance with Emission Standards	Yes	
§63.7(a)(1)–(2)	Applicability and Performance Test Dates	No	Subpart FFFFF and specifies performance test applicability and dates.
§63.7(a)(3), (b), (c)–(h)	Performance Testing Requirements	Yes	
§63.8(a)(1)–(3), (b), (c)(1)–(3), (c)(4)(i)–(ii), (c)(5)–(6), (c)(7)–(8), (f)(1)–(5), (g)(1)–(4)	Monitoring Requirements	Yes	CMS requirements in §§63.8(c)(4)(i)–(ii), (c)(5)–(6), (d), and (e) apply only to COMS.
§63.8(a)(4)	Additional Monitoring Requirements for Control Devices in §63.11	No	Subpart FFFFF does not require flares.
§63.8(c)(4)	Continuous Monitoring System Requirements	No	Subpart FFFFF specifies requirements for operation of CMS.
§63.8(f)(6)	RATA Alternative	No	
§63.8(g)(5)	Data Reduction	No	Subpart FFFFF specifies data reduction requirements.
§63.9	Notification Requirements	Yes	Additional notifications for CMS in §63.9(g) apply only to COMS.
§63.10(a), (b)(1), (b)(2)(i)–(xii), (b)(2)(xiv), (b)(3), (c)(1)–(6), (c)(9)–(15), (d), (e)(1)–(2), (e)(4), (f)	Recordkeeping and Reporting Requirements	Yes	Additional records for CMS in §63.10(c)(1)–(6), (9)–(15), and reports in §63.10(d)(1)–(2) apply only to COMS.
§63.10(b)(2) (xiii)	CMS Records for RATA Alternative	No	
§63.10(c)(7)–(8)	Records of Excess Emissions and Parameter Monitoring Exceedances for CMS	No	Subpart FFFFF specifies record requirements.
§63.10(e)(3)	Excess Emission Reports	No	Subpart FFFFF specifies reporting requirements

Citation	Subject	Applies to Subpart FFFFF	Explanation
§63.11	Control Device Requirements	No	Subpart FFFFF does not require flares.
§63.12	State Authority and Delegations	Yes.	
§63.13–§63.15	Addresses, Incorporation by Reference, Availability of Information	Yes.	

[68 FR 27663, May 20, 2003, as amended at 71 FR 39591, July 13, 2006]

SECTION D.8 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Number 1 BOP Shop.

(a) Two (2) Stations, identified as No. 1 and No. 2, Hot Metal Transfer and Desulfurization Stations. The Desulfurization Stations were originally constructed in 1981 and the Hot Metal Transfer Stations were originally constructed in 1965, and replaced in 1998. Each station consists of Hot Metal Desulfurization, SSDS0201, Hot Metal Transfer SSMT0203 and Slag Skimming SSSS0205. Hot metal from the blast furnaces is desulfurized and skimmed prior to charging in the steel making vessels. The maximum capacity of each station is 456 tons per hour. Each station is equipped with a local exhaust ventilation hood to capture emissions ducted to the Hot Metal Desulfurization/Skimming Stations Baghouse SS3100. The desulfurization units are equipped with nitrogen suppression around where the desulfurization lance penetrates the hood hole.

(b) One (1) Flux handling system, identified as SSFH0206, constructed in 1965, used for unloading, temporary storage, and transfer of fluxing agents to the steel making vessels, with a maximum capacity of 80 tons per hour. Emissions are controlled by No. 1, No. 2 and No. 3 baghouses SS3058, SS3059, and SS3053. Nos. 1 and 2 exhaust inside the building and No. 3 discharges through stack SS6056.

(c) Basic Oxygen Process (BOP) Vessels, constructed in 1965, consisting of BOP vessel M, identified as SSVM0234, vessel E, identified as SSVE0235 and vessel D, identified as SSVD0236, with a maximum capacity of 250 tons per hour each. Emissions are controlled by open combustion hoods and an exhaust emission hood collection system, which exhausts emissions to the Gas Cleaning Systems SS3103 and SS3104.

(d) Two (2) gas cleaning systems SS3103 and SS3104 that process the exhaust gases from the three (3) steel making vessels consisting of three (3) quenchers, two (2) scuppers, two (2) venturi scrubbers, two (2) separators, two (2) gas coolers fitted with internal mist eliminators and two (2) induced draft fans. Emissions exhaust through stacks SS6102 and SS6103.

(e) CASbell/OB Lancing Stations M, D and E, include the controlled argon stirring process and blowing of oxygen to maintain temperature and chemistry. Constructed in 1981, Station M, identified as SSCM0231, Station E identified as SSCE0232, and Station D identified as SSCD0233 with a maximum capacity of 250 tons per hour each. Emissions are controlled by the CASbell/OB Lancing baghouse SS3105, exhausting through Stack SS6104 and uncaptured emissions venting to the roof monitor SS6636.

(f) One (1) Slingot Moulding Station, including the casting of bottom-poured steel ingots, identified as SSMS0227, constructed in 1965, exhausting to the roof monitor SS6637.

(g) Nine (9) natural gas fired Ladle Preheaters and Dryers identified as No. 1 through 9, with 1 through 4, constructed in 1983, 5 and 6 constructed in 1982 and 7 through 9 construction unknown. Six (6) Preheaters with a capacity of 14 MMBtu/hr each and three (3) Dryers with a capacity of 10 MMBtu/hr each, identified as SSLD0230, exhausting through Roof Monitor SS6637.

(h) One (1) Continuous Caster, identified as SCSC0274, constructed in 1967, including a Tundish dryer with a heating capacity of 7.0 MMBtu/hr per hour, continuously casting steel slabs with a maximum capacity of 275 tons per hour. Emissions exhaust through Roof Monitor SC6638.

(i) One (1) fugitive emissions mitigation system at the No. 1 BOP Shop, constructed in June 2002, consisting of a capture hood system ducted to a 99% efficient baghouse with a flow rate of 11,500 acfm.

(j) One emergency slag skimming station with a maximum capacity of 456 tons per hour with emissions ducted to the Hot Metal Transfer Station and Desulfurization/Skimming Stations Baghouse SS3100.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.8.1 General Provisions Relating to Hazardous Air Pollutants (HAPs) [326 IAC 20-1][40 CFR 63, Subpart A] [Table 4 to 40 CFR 63, Subpart FFFFF]

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the affected sources, No. 1 BOP Shop including the BOP Furnace, and shop ancillary operations (hot metal transfer, hot metal desulfurization, slag skimming, ladle metallurgy, and roof monitoring except when otherwise specified by Table 4 to 40 CFR 63, Subpart FFFFF.

D.8.2 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38]

Pursuant to 326 IAC 6.8-2-38, PM_{10} emissions from the No. 1 Basic Oxygen Process Shop operations shall comply with the following:

(a) The PM_{10} emissions from the No. 1 BOP Shop Hot Metal Transfer and Desulfurization Stations Baghouse discharge shall not exceed 0.007 grains per dry standard cubic foot of exhaust air and 15.0 pounds per hour.

(b) The PM_{10} emissions from the No. 1 BOP Shop Gas Cleaning System Stacks SS6102 and SS6103 shall not exceed 0.011 grains per dry standard cubic foot of exhaust air and a total of 46.0 pounds per hour.

(c) The PM_{10} emissions from the No. 1 BOP CASBell/OB Lancing Baghouse Stack SS6104 shall not exceed 0.0070 grains per dry standard cubic foot of exhaust air and 5.10 pounds per hour.

(d) Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emissions limitations apply to one (1) stack serving the multiple units specified when the facility description notes stack serving, and to each stack of multiple stacks serving multiple facilities when the facility description notes each stack serving.

D.8.3 Particulate Emissions Limitations [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), the particulate emissions from the roof monitors SS6636, NS6637 and SS6638 shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

D.8.4 Lake County Opacity Limitations [326 IAC 6.8-3-4]

Pursuant to 326 IAC 6.8-3-4, the visible emissions from the Number 1 Basic Oxygen Furnace operations shall comply with the following:

(a) Opacity from the Hot Metal Transfer and Desulfurization Stations baghouse stack discharge shall not exceed five percent (5%) opacity, for any three (3) minute average.

(b) Opacity from the No. 1 BOP Shop Roof Monitor SS6636 Operations shall not exceed twenty percent (20%) for any three (3) minute average.

(c) Opacity from the BOP Furnace Operations Gas Cleaning System Stacks SS6102 and SS6103 shall not exceed twenty percent (20%), for any six (6) minute average.

D.8.5 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20(c)(3)]

Pursuant to 326 IAC 7-4.1-20(c)(3), an emission unit shall burn natural gas only:

(a) If it is not listed in this rule; or

(b) under any operating condition not specifically listed in this rule.

D.8.6 Sulfur Dioxide (SO_2) Limitations Hot Metal Transfer and Desulfurization Stations [326 IAC 7-4.1-20]

(a) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, the Permittee shall comply with the following:

(1) The SO_2 emissions from the Nos. 1 and 2 Hot Metal Transfer and Desulfurization Stations Baghouse as measured during all hot metal processing activities shall not exceed 0.05 pound per ton of hot metal. Hot metal processing will include hot metal transfer, hot metal desulfurization reagent injection and hot metal skimming, as applicable.

(2) The SO_2 emissions from the Nos. 1 and 2 Hot Metal Transfer and Desulfurization Stations Baghouse as measured during hot metal desulfurization reagent injection only shall not exceed 0.01 pound per ton of hot metal.

(b) Pursuant to 326 IAC 7-4.1-20(a)(1)(M) and ((b)(11), the SO_2 emissions from the Nos. 1 and 2 Hot Metal Transfer and Desulfurization Stations Baghouse shall not exceed 0.05 pounds per ton of hot metal and 28.54 pounds per hour.

D.8.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and any associated control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.8.8 Particulate Matter Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) Not later than thirty (30) months after issuance of this permit (Permit No. T089-7663-00121) or five (5) years from the date of the most recent compliance test which ever is earlier, in order to demonstrate compliance with Condition D.8.3, the Permittee shall perform PM_{10} testing on the No. 1 BOP Desulfurization Baghouse discharge using the appropriate methods to measure PM_{10} as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

(b) Not later than thirty (30) months after issuance of this permit (Permit No. T089-7663-00121) or two and one-half (2 ½) years from the date of the most recent compliance test which ever is earlier, in order to demonstrate compliance with Condition D.8.3, the Permittee shall perform PM_{10} testing on the No. 1 BOP Gas Cleaning Systems Stacks SS6102 and SS6103 the appropriate methods to measure PM_{10} as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

(c) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation wtih regard to the performance testing required by this condition.

D.8.9 Sulfur Dioxide Testing Requirements

(a) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, within thirty (30) months after issuance of this permit (Permit No. T089-7663-00121) or two and one-half (2 ½) years from the date of the most recent valid compliance test whichever is earlier or an alternative date as determined by OAQ, Compliance Data Section, the Permittee shall perform SO_2 emission testing on the No. 1 and No. 2 Hot Metal Desulfurization station baghouse discharge utilizing the test method 40 CFR 60, Appendix A Method 6C or other methods as submitted in accordance with the U.S. EPA Administrative Consent Order, issued January 2, 2004, to show compliance with condition D.8.7(a). This test shall be repeated at least once every two and one-half (2 ½) years from the date of the most recent valid compliance demonstration.

(b) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, within thirty (30) months after issuance of this permit (Permit No. T089-7663-00121) or two and one-half (2 ½) years from the date of the most recent valid compliance test whichever is earlier or an alternative date as determined by OAQ, Compliance Data Section , the Permittee shall perform SO_2 emission testing on the No. 1 and No. 2 Hot Metal Desulfurization Station Baghouse discharge utilizing the test method 40 CFR 60, Appendix A Method 6C or other methods as submitted in accordance with the U.S. EPA Administrative Consent Order, issued January 2, 2004, to demonstrate compliance with condition D.8.7(b) during the desulfurization reagent injection only. This test shall be repeated at least once every two and one-half (2 ½) years from the date of the most recent valid compliance demonstration.

(c) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004 demonstration of compliance by performance testing per D.8.9 (b) above shall not fulfill the compliance demonstration requirement for D.8.9(a).

(d) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation wtih regard to the performance testing required by this condition.

D.8.10 Particulate Matter Control [326 IAC 2-7-6(6)]

(a) Except as otherwise provided by statue, rule or this permit, the control devices listed below shall be in operation for particulate emissions control at all times the associated process is in operation. The control devices are as follows:

(1) The Hot Metal Desulfurization/Skimming Baghouse SS3100,

(2) Flux Handling System Baghouses SS3053, SS3058 and SS3059,

(3) BOP Gas Cleaning systems SS3103 and SS3104; and

(4) CASBell/OB Lancing Station Baghouse SS3105.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

D.8.11 Visible Emissions Notations

(a) Visible emission notations of the BOP Operations Gas Cleaning System stacks SS6102 and SS6103, and CASBell/OB Lancing Station Baghouse stack SS6104, shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

(f) The Permittee shall comply with the most current Continuous Compliance Plan visible emission evaluation program. Section C - Continuous Compliance Plan contains the Permittee's obligation with regard to the visible emission evaluation program required by this condition.

D.8.12 Parametric Monitoring

(a) The Permittee shall record the pressure drop across the CASBell/OB Lancing Stations baghouse SS3105 used in conjunction with the CASBell/OB Lancing Stations, at least once per day when the CASBell/OB Lancing Stations are in operation. When for any one reading, the pressure drop across the baghouses is outside the normal range of 2.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation of this permit.

(b) The Permittee shall record the pressure drop and flow rate of the scrubbers used in conjunction with the three (3) BOP vessels M, E, and D, at least once per day when the three (3) BOP vessels M, E, and D units are in operation. When for any one reading, the pressure drop across the scrubbers is outside the normal range of 50.0 and 90.0 inches of water or the flow rate of the scrubbers is outside the range of 2500 and 4500 gallons per minute (gpm) or ranges established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A reading that is outside the above mentioned ranges for respective parameters is not a deviation from this permit. Failure to take response steps shall be considered a deviation of this permit.

(c) The Permittee shall record the pressure drop across the Hot Metal Transfer and Desulfurization Baghouse SS3100 used in conjunction with the No. 1 BOP Hot Metal Desulfurization stations, at least once per day when the No. 1 BOP Hot Metal

Desulfurization Stations are in operation. When for any one reading, the pressure drop across the baghouses is outside the normal range of 2 to 10 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation of this permit.

(d) The Permittee shall comply with the most current Continuous Compliance Plan for the baghouse operation, recording and maintenance. Section C - Continuous Compliance Plan contains the Permittee's obligation with regard to the baghouse operation, recording and maintenance required by this condition.

(e) The instruments used for determining the pressure and flow rate shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.8.13 Scrubber Failure Detection

In the event that a scrubber failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.8.14 General Record Keeping Requirements

(a) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, and in order to document the compliance status with Condition D.8.6, the Permittee shall keep records of the monthly hot metal throughput for the No. 1 and No. 2 Hot Metal Transfer and Desulfurization Stations.

(b) To document the compliance status with Visible Emission Notations, Condition D.8.11, the Permittee shall maintain records of once per day visible emission notations of the Hot Metal Desulfurization Baghouse Stack SS6101, the BOP Gas Cleaning System Stacks SS6102 and SS6103 and the CASBell/OB Lancing Station Baghouse Stacks SS6104 exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(c) To document the compliance status with Condition D.8.12, the Permittee shall maintain records of the parametric monitoring CASBell/OB Lancing Station Baghouse SS3105 and Hot Metal Transfer and Desulfurization Baghouse SS3100 total static pressure drop, and No. 1 BOP Shop Gas Cleaning System scrubbers, pressure drop across the venturi throats and scrubber supply water flow rate once per day during normal operation. The Permittee shall include in its daily record when a pressure drop reading and/or flow rate reading is not taken and the reason for the lack of pressure drop reading and/or flow rate reading (e.g. the process did not operate that day).

(d) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel manufacturing [40 CFR 63, Subpart FFFFF]

D.8.15 National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel manufacturing – Basic Oxygen Process Furnaces (BOPF) [40 CFR 63, Subpart FFFFF]

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart FFFFF—National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities

Source: 68 FR 27663, May 20, 2003, unless otherwise noted.

What This Subpart Covers

§ 63.7780 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for integrated iron and steel manufacturing facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with all applicable emission limitations and operation and maintenance requirements in this subpart.

§ 63.7781 Am I subject to this subpart?

You are subject to this subpart if you own or operate an integrated iron and steel manufacturing facility that is (or is part of) a major source of hazardous air pollutants (HAP) emissions. Your integrated iron and steel manufacturing facility is a major source of HAP if it emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

§ 63.7782 What parts of my plant does this subpart cover?

(a) This subpart applies to each new and existing affected source at your integrated iron and steel manufacturing facility.

(b) The affected sources are each new or existing sinter plant, blast furnace, and basic oxygen process furnace (BOPF) shop at your integrated iron and steel manufacturing facility.

(c) This subpart covers emissions from the sinter plant windbox exhaust, discharge end, and sinter cooler; the blast furnace casthouse; and the BOPF shop including each individual BOPF and shop ancillary operations (hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy).

(d) A sinter plant, blast furnace, or BOPF shop at your integrated iron and steel manufacturing facility is existing if you commenced construction or reconstruction of the affected source before July 13, 2001.

(e) A sinter plant, blast furnace, or BOPF shop at your integrated iron and steel manufacturing facility is new if you commence construction or reconstruction of the affected source on or after July 13, 2001. An affected source is reconstructed if it meets the definition of reconstruction in §63.2.

§ 63.7783 When do I have to comply with this subpart?

(a) If you have an existing affected source, you must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to you by the dates specified in paragraphs (a)(1) and (2) of this section.

(1) No later than May 22, 2006 for all emissions sources at an existing affected source except for a sinter cooler at an existing sinter plant.

(d) If your integrated iron and steel manufacturing facility is not a major source and becomes a major source of HAP, the following compliance dates apply to you.

(1) Any portion of the existing integrated iron and steel manufacturing facility that becomes a new affected source or a new reconstructed source must be in compliance with this subpart upon startup.

(2) All other parts of the integrated iron and steel manufacturing facility must be in compliance with this subpart no later than 2 years after it becomes a major source.

(e) You must meet the notification and schedule requirements in §63.7840. Several of these notifications must be submitted before the compliance date for your affected source.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39585, July 13, 2006]

Emission Limitations

§ 63.7790 What emission limitations must I meet?

(a) You must meet each emission limit and opacity limit in Table 1 to this subpart that applies to you.

(b) You must meet each operating limit for capture systems and control devices in paragraphs (b)(1) through (3) of this section that applies to you.

(1) You must operate each capture system applied to emissions from a sinter plant discharge end or blast furnace casthouse or to secondary emissions from a BOPF at or above the lowest value or settings established for the operating limits in your operation and maintenance plan;

(2) For each venturi scrubber applied to meet any particulate emission limit in Table 1 to this subpart, you must maintain the hourly average pressure drop and scrubber water flow rate at or above the minimum levels established during the initial performance test.

(3) For each electrostatic precipitator applied to emissions from a BOPF, you must maintain the hourly average opacity of emissions exiting the control device at or below 10 percent.

(c) An owner or operator who uses an air pollution control device other than a baghouse, venturi scrubber, or electrostatic precipitator must submit a description of the device; test results collected in accordance with §63.7822 verifying the performance of the device for reducing emissions of particulate matter to the atmosphere to the levels required by this subpart; a copy of the operation and maintenance plan required in §63.7800(b); and appropriate operating parameters that will be monitored to maintain continuous compliance with the applicable emission limitation(s). The monitoring plan identifying the operating parameters to be monitored is subject to approval by the Administrator.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39585, July 13, 2006]

Operation and Maintenance Requirements

§ 63.7800 What are my operation and maintenance requirements?

(a) As required by §63.6(e)(1)(i), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.

(b) You must prepare and operate at all times according to a written operation and maintenance plan for each capture system or control device subject to an operating limit in §63.7790(b). Each plan must address the elements in paragraphs (b)(1) through (7) of this section.

(1) Monthly inspections of the equipment that is important to the performance of the total capture system (*e.g.,* pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (*e.g.,* presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in the ductwork, and fan erosion). The operation and maintenance plan also must include requirements to repair any defect or deficiency in the capture system before the next scheduled inspection.

(2) Preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

(3) Operating limits for each capture system applied to emissions from a sinter plant discharge end or blast furnace casthouse, or to secondary emissions from a BOPF. You must establish the operating limits according to the requirements in paragraphs (b)(3)(i) through (iii) of this section.

(i) Select operating limit parameters appropriate for the capture system design that are representative and reliable indicators of the performance of the capture system. At a minimum, you must use appropriate operating limit parameters that indicate the level of the ventilation draft and the damper position settings for the capture system when operating to collect emissions, including revised settings for seasonal variations. Appropriate operating limit parameters for ventilation draft include, but are not limited to, volumetric flow rate through each separately ducted hood, total volumetric flow rate at the inlet to the control device to which the capture system is vented, fan motor amperage, or static pressure.

(ii) For each operating limit parameter selected in paragraph (b)(3)(i) of this section, designate the value or setting for the parameter at which the capture system operates during the process operation. If your operation allows for more than one process to be operating simultaneously, designate the value or setting for the parameter at which the capture system operates during each possible configuration that you may operate.

(iii) Include documentation in your plan to support your selection of the operating limits established for the capture system. This documentation must include a description of the capture system design, a description of the capture system operating during production, a description of each selected operating limit parameter, a rationale for why you chose the parameter, a description of the method used to monitor the parameter according to the requirements of §63.7830(a), and the data used to set the value or setting for the parameter for each of your process configurations.

(4) Corrective action procedures for baghouses equipped with bag leak detection systems or continuous opacity monitoring systems (COMS). In the event a bag leak detection system alarm is triggered or emissions from a baghouse equipped with a COMS exceed an hourly average opacity of 5 percent, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Corrective actions may include, but are not limited to:

(i) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media or otherwise repairing the control device.

(iv) Sealing off a defective baghouse compartment.

(v) Cleaning the bag leak detection system probe, or otherwise repair the bag leak detection system.

(vi) Shutting down the process producing the particulate emissions.

(5) Corrective action procedures for venturi scrubbers equipped with continuous parameter monitoring systems (CPMS). In the event a venturi scrubber exceeds the operating limit in §63.7790(b)(2), you must take corrective actions consistent with your site-specific monitoring plan in accordance with §63.7831(a).

(6) Corrective action procedures for electrostatic precipitators equipped with COMS. In the event an electrostatic precipitator exceeds the operating limit in §63.7790(b)(3), you must take corrective actions consistent with your site-specific monitoring plan in accordance with §63.7831(a).

[68 FR 27663, May 20, 2003, as amended at 71 FR 39585, July 13, 2006]

General Compliance Requirements

§ 63.7810 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in §63.2.

(b) During the period between the compliance date specified for your affected source in §63.7783 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(c) You must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3).

[68 FR 27663, May 20, 2003, as amended at 71 FR 20468, Apr. 20, 2006]

Initial Compliance Requirements

§ 63.7820 By what date must I conduct performance tests or other initial compliance demonstrations?

(a) You must conduct a performance test to demonstrate initial compliance with each emission and opacity limit in Table 1 to this subpart that applies to you. You must also conduct a performance test to demonstrate initial compliance with the 30-day rolling average operating limit for the oil content of the sinter plant feedstock in §63.7790(d)(1) or alternative limit for volatile organic compound emissions from the sinter plant windbox exhaust stream in §63.7790(d)(2). You must conduct the performance tests within 180 calendar days after the compliance date that is specified in §63.7783 for your affected source and report the results in your notification of compliance status.

(b) For each operation and maintenance requirement that applies to you where initial compliance is not demonstrated using a performance test or opacity observation, you must demonstrate initial compliance within 30 calendar days after the compliance date that is specified for your affected source in §63.7783.

§ 63.7821 When must I conduct subsequent performance tests?

(a) You must conduct subsequent performance tests to demonstrate compliance with all applicable PM and opacity limits in Table 1 to this subpart at the frequencies specified in paragraphs (b) through (d) of this section.

(b) For each sinter cooler at an existing sinter plant and each emissions unit equipped with a control device other than a baghouse, you must conduct subsequent performance tests no less frequently than twice (at mid-term and renewal) during each term of your title V operating permit.

(c) For each emissions unit equipped with a baghouse, you must conduct subsequent performance tests no less frequently than once during each term of your title V operating permit.

(d) For sources without a title V operating permit, you must conduct subsequent performance tests every 2.5 years.

[71 FR 39586, July 13, 2006]

§ 63.7822 What test methods and other procedures must I use to demonstrate initial compliance with the emission limits for particulate matter?

(a) You must conduct each performance test that applies to your affected source according to the requirements in §63.7(e)(1) and the conditions detailed in paragraphs (b) through (i) of this section.

(b) To determine compliance with the applicable emission limit for particulate matter in Table 1 to this subpart, follow the test methods and procedures in paragraphs (b)(1) and (2) of this section.

(1) Determine the concentration of particulate matter according to the following test methods in appendix A to part 60 of this chapter:

(i) Method 1 to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 5, 5D, or 17, as applicable, to determine the concentration of particulate matter (front half filterable catch only).

(2) Collect a minimum sample volume of 60 dry standard cubic feet (dscf) of gas during each particulate matter test run. Three valid test runs are needed to comprise a performance test.

(d) If you apply two or more control devices in parallel to emissions from a sinter plant discharge end or a BOPF, compute the average flow-weighted concentration for each test run using Equation 2 of this section as follows:

$$C_W = \frac{\sum_{i=1}^{n} C_i Q_i}{\sum_{i=1}^{n} Q_i} \qquad \text{(Eq. 2)}$$

Where:

C_w= Flow-weighted concentration, gr/dscf;

C_i= Concentration of particulate matter from exhaust stream “i”, gr/dscf; and

Q_i= Volumetric flow rate of effluent gas from exhaust stream “i”, dry standard cubic foot per minute (dscfm).

(f) For a primary emission control device applied to emissions from a BOPF with a closed hood system, sample only during the primary oxygen blow and do not sample during any subsequent reblows. Continue sampling for each run for an integral number of primary oxygen blows.

(g) For a primary emission control system applied to emissions from a BOPF with an open hood system and for a control device applied solely to secondary emissions from a BOPF, you must complete the requirements of paragraphs (g)(1) and (2) of this section:

(1) Sample only during the steel production cycle. Conduct sampling under conditions that are representative of normal operation. Record the start and end time of each steel production cycle and each period of abnormal operation; and

(2) Sample for an integral number of steel production cycles. The steel production cycle begins when the scrap is charged to the furnace and ends 3 minutes after the slag is emptied from the vessel into the slag pot.

(h) For a control device applied to emissions from BOPF shop ancillary operations (hot metal transfer, skimming, desulfurization, or ladle metallurgy), sample only when the operation(s) is being conducted.

(i) Subject to approval by the permitting authority, you may conduct representative sampling of stacks when there are more than three stacks associated with a process.

§ 63.7823 What test methods and other procedures must I use to demonstrate initial compliance with the opacity limits?

(a) You must conduct each performance test that applies to your affected source according to the requirements in §63.7(h)(5) and the conditions detailed in paragraphs (b) through (d) of this section.

(b) You must conduct each visible emissions performance test such that the opacity observations overlap with the performance test for particulate matter.

(d) To determine compliance with the applicable opacity limit in Table 1 to this subpart for BOPF shops:

(1) For an existing BOPF shop:

(i) Using a certified observer, determine the opacity of emissions according to Method 9 in appendix A to part 60 of this chapter except as specified in paragraphs (d)(1)(ii) and (iii) of this section.

(ii) Instead of procedures in section 2.4 of Method 9 in appendix A to part 60 of this chapter, record observations to the nearest 5 percent at 15-second intervals for at least three steel production cycles.

(iii) Instead of procedures in section 2.5 of Method 9 in appendix A to part 60 of this chapter, determine the 3-minute block average opacity from the average of 12 consecutive observations recorded at 15-second intervals.

(4) Opacity observations must cover the entire steel production cycle and must be made for at least three cycles. The steel production cycle begins when the scrap is charged to the furnace and ends 3 minutes after the slag is emptied from the vessel into the slag pot.

(5) Determine and record the starting and stopping times of the steel production cycle.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39586, July 13, 2006]

§ 63.7824 What test methods and other procedures must I use to establish and demonstrate initial compliance with operating limits?

(a) For each capture system subject to an operating limit in §63.7790(b)(1), you must certify that the system operated during the performance test at the site-specific operating limits established in your operation and maintenance plan using the procedures in paragraphs (a)(1) through (4) of this section.

(1) Concurrent with all opacity observations, measure and record values for each of the operating limit parameters in your capture system operation and maintenance plan according to the monitoring requirements specified in §63.7830(a).

(2) For any dampers that are manually set and remain at the same position at all times the capture system is operating, the damper position must be visually checked and recorded at the beginning and end of each opacity observation period segment.

(3) Review and record the monitoring data. Identify and explain any times the capture system operated outside the applicable operating limits.

(4) Certify in your performance test report that during all observation period segments, the capture system was operating at the values or settings established in your capture system operation and maintenance plan.

(b) For a venturi scrubber subject to operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you must establish site-specific operating limits according to the procedures in paragraphs (b)(1) and (2) of this section. You may establish the parametric monitoring limit during the initial performance test or during any other performance test run that meets the emission limit.

(1) Using the CPMS required in §63.7830(c), measure and record the pressure drop and scrubber water flow rate during each run of the particulate matter performance test.

(2) Compute and record the hourly average pressure drop and scrubber water flow rate for each individual test run. Your operating limits are the lowest average pressure drop and scrubber water flow rate value in any of the three runs that meet the applicable emission limit.

(c) You may change the operating limits for a capture system or venturi scrubber if you meet the requirements in paragraphs (c)(1) through (3) of this section.

(1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate compliance with the applicable emission limitation in Table 1 to this subpart.

(3) Establish revised operating limits according to the applicable procedures in paragraphs (a) and (b) of this section for a control device or capture system.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39586, July 13, 2006]

§ 63.7825 How do I demonstrate initial compliance with the emission limitations that apply to me?

(a) For each affected source subject to an emission or opacity limit in Table 1 to this subpart, you have demonstrated initial compliance if:

(1) You meet the conditions in Table 2 to this subpart; and

(2) For each capture system subject to the operating limit in §63.7790(b)(1), you have established appropriate site-specific operating limit(s) and have a record of the operating parameter data measured during the performance test in accordance with §63.7824(a)(1); and

(3) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you have established appropriate site-specific operating limits and have a record of the pressure drop and scrubber water flow rate measured during the performance test in accordance with §63.7824(b).

(c) For each emission limitation that applies to you, you must submit a notification of compliance status according to §63.7840(e).

[68 FR 27663, May 20, 2003, as amended at 71 FR 39586, July 13, 2006]

§ 63.7826 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

(a) For a capture system applied to emissions from a sinter plant discharge end or blast furnace casthouse or to secondary emissions from a BOPF, you have demonstrated initial compliance if you meet all of the conditions in paragraphs (a)(1) through (4) of this section.

(1) Prepared the capture system operation and maintenance plan according to the requirements of §63.7800(b), including monthly inspection procedures and detailed descriptions of the operating parameter(s) selected to monitor the capture system;

(2) Certified in your performance test report that the system operated during the test at the operating limits established in your operation and maintenance plan;

(3) Submitted a notification of compliance status according to the requirements in §63.7840(e), including a copy of the capture system operation and maintenance plan and your certification that you will operate the capture system at the values or settings established for the operating limits in that plan; and

(4) Prepared a site-specific monitoring plan according to the requirements in §63.7831(a).

(b) For each control device subject to operating limits in §63.7790(b)(2) or (3), you have demonstrated initial compliance if you meet all the conditions in paragraphs (b)(1) through (3) of this section.

(1) Prepared the control device operation and maintenance plan according to the requirements of §63.7800(b), including a preventative maintenance schedule and, as applicable, detailed descriptions of the corrective action procedures for baghouses and other control devices;

(2) Submitted a notification of compliance status according to the requirements in §63.7840(e), including a copy of the operation and maintenance plan; and

(3) Prepared a site-specific monitoring plan according to the requirements in §63.7831(a).

[68 FR 27663, May 20, 2003, as amended at 71 FR 39586, July 13, 2006]

Continuous Compliance Requirements

§ 63.7830 What are my monitoring requirements?

(a) For each capture system subject to an operating limit in §63.7790(b)(1) established in your capture system operation and maintenance plan, you must install, operate, and maintain a CPMS according to the requirements in §63.7831(e) and the requirements in paragraphs (a)(1) through (3) of this section.

(1) Dampers that are manually set and remain in the same position are exempt from the requirement to install and operate a CPMS. If dampers are not manually set and remain in the same position, you must make a visual check at least once every 24 hours to verify that each damper for the capture system is in the same position as during the initial performance test.

(3) If you use a flow measurement device to monitor the operating limit parameter for a capture system applied to secondary emissions from a BOPF, you must monitor the average rate for each steel production cycle (*e.g.,* the average actual volumetric flow rate through each separately ducted hood for each steel production cycle, the average

total volumetric flow rate at the inlet to the control device for each steel production cycle) according to the requirements in §63.7832.

(b) Except as provided in paragraph (b)(3) of this section, you must meet the requirements in paragraph (b)(1) or (2) of this section for each baghouse applied to meet any particulate emission limit in Table 1 to this subpart. You must conduct inspections of each baghouse according to the requirements in paragraph (b)(4) of this section.

(1) Install, operate, and maintain a bag leak detection system according to §63.7831(f) and monitor the relative change in particulate matter loadings according to the requirements in §63.7832; or

(2) If you do not install and operate a bag leak detection system, you must install, operate, and maintain a COMS according to the requirements in §63.7831(h) and monitor the hourly average opacity of emissions exiting each control device stack according to the requirements in §63.7832.

(3) A bag leak detection system and COMS are not required for a baghouse that meets the requirements in paragraphs (b)(3)(i) and (ii) of this section.

(i) The baghouse is a positive pressure baghouse and is not equipped with exhaust gas stacks; and

(ii) The baghouse was installed before August 30, 2005.

(4) You must conduct inspections of each baghouse at the specified frequencies according to the requirements in paragraphs (b)(4)(i) through (viii) of this section.

(i) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual.

(ii) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms.

(iii) Check the compressed air supply for pulse-jet baghouses each day.

(iv) Monitor cleaning cycles to ensure proper operation using an appropriate methodology.

(v) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means.

(vi) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or laying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices.

(vii) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks.

(viii) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

(c) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you must install, operate, and maintain CPMS according to the requirements in §63.7831(g) and monitor the hourly average pressure drop and water flow rate according to the requirements in §63.7832.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39586, July 13, 2006]

§ 63.7831 What are the installation, operation, and maintenance requirements for my monitors?

(a) For each CPMS required in §63.7830, you must develop and make available for inspection upon request by the permitting authority a site-specific monitoring plan that addresses the requirements in paragraphs (a)(1) through (8) of this section.

(1) Installation of the CPMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.,* on or downstream of the last control device);

(2) Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system;

(3) Performance evaluation procedures and acceptance criteria (*e.g.,* calibrations);

(4) Ongoing operation and maintenance procedures in accordance with the general requirements of §§63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8);

(5) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d);

(6) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §§63.10(c), (e)(1), and (e)(2)(i);

(7) Corrective action procedures you will follow in the event a venturi scrubber exceeds the operating limit in §63.7790(b)(2); and

(b) Unless otherwise specified, each CPMS must:

(1) Complete a minimum of one cycle of operation for each successive 15-minute period and collect a minimum of three of the required four data points to constitute a valid hour of data;

(2) Provide valid hourly data for at least 95 percent of every averaging period; and

(3) Determine and record the hourly average of all recorded readings.

(c) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(d) You must operate and maintain the CPMS in continuous operation according to the site-specific monitoring plan.

(e) For each capture system subject to an operating limit in §63.7790(b)(1), you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a) through (d) of this section.

(f) For each baghouse equipped with a bag leak detection system according to §63.7830(b)(1), you must install, operate, and maintain the bag leak detection system according to the requirements in paragraphs (f)(1) through (7) of this section.

(1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(2) The system must provide output of relative changes in particulate matter loadings.

(3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over a preset level. The alarm must be located such that it can be heard by the appropriate plant personnel.

(4) Each system that works based on the triboelectric effect must be installed, operated, and maintained in a manner consistent with the guidance document, “Fabric Filter Bag Leak Detection Guidance,” EPA–454/R–98–015, September 1997. You may install, operate, and maintain other types of bag leak detection systems in a manner consistent with the manufacturer's written specifications and recommendations.

(5) To make the initial adjustment of the system, establish the baseline output by adjusting the sensitivity (range) and the averaging period of the device. Then, establish the alarm set points and the alarm delay time.

(6) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in your operation and maintenance plan. Do not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365-day period unless a responsible official certifies, in writing, that the baghouse has been inspected and found to be in good operating condition.

(7) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(g) For each venturi scrubber subject to operating limits in §63.7790(b)(2) for pressure drop and scrubber water flow rate, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a) through (d) of this section.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39587, July 13, 2006]

§ 63.7832 How do I monitor and collect data to demonstrate continuous compliance?

(a) Except for monitoring malfunctions, out-of-control periods as specified in §63.8(c)(7), associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times an affected source is operating.

(b) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels or to fulfill a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance.

(c) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

§ 63.7833 How do I demonstrate continuous compliance with the emission limitations that apply to me?

(a) You must demonstrate continuous compliance for each affected source subject to an emission or opacity limit in §63.7790(a) by meeting the requirements in Table 3 to this subpart.

(b) You must demonstrate continuous compliance for each capture system subject to an operating limit in §63.7790(b)(1) by meeting the requirements in paragraphs (b)(1) and (2) of this section.

(1) Operate the capture system at or above the lowest values or settings established for the operating limits in your operation and maintenance plan; and

(2) Monitor the capture system according to the requirements in §63.7830(a) and collect, reduce, and record the monitoring data for each of the operating limit parameters according to the applicable requirements of this subpart;

(c) For each baghouse applied to meet any particulate emission limit in Table 1 to this subpart, you must demonstrate continuous compliance by meeting the requirements in paragraph (c)(1) or (2) of this section as applicable, and paragraphs (c)(3) and (4) of this section:

(1) For a baghouse equipped with a bag leak detection system, operating and maintaining each bag leak detection system according to §63.7831(f) and recording all information needed to document conformance with these requirements. If you increase or decrease the sensitivity of the bag leak detection system beyond the limits specified in §63.7831(f)(6), you must include a copy of the required written certification by a responsible official in the next semiannual compliance report.

(2) For a baghouse equipped with a COMS, operating and maintaining each COMS and reducing the COMS data according to §63.7831(h).

(3) Inspecting each baghouse according to the requirements in §63.7830(b)(4) and maintaining all records needed to document conformance with these requirements.

(4) Maintaining records of the time you initiated corrective action in the event of a bag leak detection system alarm or when the hourly average opacity exceeded 5 percent, the corrective action(s) taken, and the date on which corrective action was completed.

(d) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you must demonstrate continuous compliance by meeting the requirements of paragraphs (d)(1) through (4) of this section:

(1) Maintaining the hourly average pressure drop and scrubber water flow rate at levels no lower than those established during the initial or subsequent performance test;

(2) Operating and maintaining each venturi scrubber CPMS according to §63.7831(g) and recording all information needed to document conformance with these requirements; and

(3) Collecting and reducing monitoring data for pressure drop and scrubber water flow rate according to §63.7831(b) and recording all information needed to document conformance with these requirements.

(4) If the hourly average pressure drop or scrubber water flow rate is below the operating limits, you must follow the corrective action procedures in paragraph (g) of this section.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39587, July 13, 2006]

§ 63.7834 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?

(a) For each capture system and control device subject to an operating limit in §63.7790(b), you must demonstrate continuous compliance with the operation and maintenance requirements in §63.7800(b) by meeting the requirements of paragraphs (a)(1) through (4) of this section:

(1) Making monthly inspections of capture systems and initiating corrective action according to §63.7800(b)(1) and recording all information needed to document conformance with these requirements;

(2) Performing preventative maintenance according to §63.7800(b)(2) and recording all information needed to document conformance with these requirements;

(3) Initiating and completing corrective action for a baghouse equipped with a bag leak detection system or COMS according to §63.7800(b)(4) and recording all information needed to document conformance with these requirements, including the time you initiated corrective action, the corrective action(s) taken, and date on which corrective action was completed.

(4) Initiating and completing corrective action for a venturi scrubber equipped with a CPMS or an electrostatic precipitator equipped with a COMS according to §63.7833(g) and recording all information needed to document conformance with these requirements, including the time you initiated corrective action, the corrective action(s) taken within the first 24 hours according to §63.7833(g)(1) and whether they were successful, the corrective action(s) taken

within the second 24 hours according to §63.7833(g)(2) and whether they were successful, and the date on which corrective action was completed.

(b) You must maintain a current copy of the operation and maintenance plan required in §63.7800(b) onsite and available for inspection upon request. You must keep the plans for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39588, July 13, 2006]

§ 63.7835 What other requirements must I meet to demonstrate continuous compliance?

(a) *Deviations.* Except as provided in §63.7833(g), you must report each instance in which you did not meet each emission limitation in §63.7790 that applies to you. This includes periods of startup, shutdown, and malfunction. You also must report each instance in which you did not meet each operation and maintenance requirement in §63.7800 that applies to you. These instances are deviations from the emission limitations and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements in §63.7841.

(b) *Startups, shutdowns, and malfunctions.* (1) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.6(e)(1).

(2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

[68 FR 27663, May 20, 2003, as amended at 71 FR 20468, Apr. 20, 2006; 71 FR 39588, July 13, 2006]

Notifications, Reports, and Records

§ 63.7840 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e) and (f)(4), and 63.9(b) through (h) that apply to you by the specified dates.

(b) As specified in §63.9(b)(2), if you startup your affected source before May 20, 2003, you must submit your initial notification no later than September 17, 2003.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in §63.7(b)(1).

(e) If you are required to conduct a performance test, opacity observation, or other initial compliance demonstration, you must submit a notification of compliance status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration that does not include a performance test, you must submit the notification of compliance status before the close of business on the 30th calendar day following completion of the initial compliance demonstration.

(2) For each initial compliance demonstration that does include a performance test, you must submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to §63.10(d)(2).

§ 63.7841 What reports must I submit and when?

(a) *Compliance report due dates.* Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements in paragraphs (a)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7783 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your source in §63.7783.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after your first compliance report is due.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (a)(1) through (4) of this section.

(b) *Compliance report contents.* Each compliance report must include the information in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (8) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there were no deviations from the continuous compliance requirements in §§63.7833 and 63.7834 that apply to you, a statement that there were no deviations from the emission limitations or operation and maintenance requirements during the reporting period.

(6) If there were no periods during which a continuous monitoring system (including a CPMS, COMS, or continuous emission monitoring system (CEMS) was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

(7) For each deviation from an emission limitation in §63.7790 that occurs at an affected source where you are not using a continuous monitoring system (including a CPMS, COMS, or CEMS) to comply with an emission limitation in this subpart, the compliance report must contain the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(7)(i) and (ii) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The total operating time of each affected source during the reporting period.

(ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable and the corrective action taken.

(8) For each deviation from an emission limitation occurring at an affected source where you are using a continuous monitoring system (including a CPMS or COMS) to comply with the emission limitation in this subpart, you must include the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(8)(i) through (xi) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The date and time that each malfunction started and stopped.

(ii) The date and time that each continuous monitoring was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous monitoring system was out-of-control as specified in §63.8(c)(7), including the information in §63.8(c)(8).

(iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(v) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(vi) A breakdown of the total duration of the deviations during the reporting period including those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.

(viii) A brief description of the process units.

(ix) A brief description of the continuous monitoring system.

(x) The date of the latest continuous monitoring system certification or audit.

(xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

(c) *Immediate startup, shutdown, and malfunction report.* If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements in §63.10(d)(5)(ii).

(d) *Part 70 monitoring report.* If you have obtained a title V operating permit for an affected source pursuant to 40 CFR part 70 or 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emission limitation or operation and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements for an affected source to your permitting authority.

§ 63.7842 What records must I keep?

(a) You must keep the following records:

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, performance evaluations, and opacity observations as required in §63.10(b)(2)(viii).

(b) For each COMS, you must keep the records specified in paragraphs (b)(1) through (4) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Monitoring data for a performance evaluation as required in §63.6(h)(7)(i) and (ii).

(3) Previous (that is, superceded) versions of the performance evaluation plan as required in §63.8(d)(3).

(4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(c) You must keep the records required in §63.6(h)(6) for visual observations.

(d) You must keep the records required in §§63.7833 and 63.7834 to show continuous compliance with each emission limitation and operation and maintenance requirement that applies to you.

§ 63.7843 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to §63.10(b)(1). You can keep the records offsite for the remaining 3 years.

Other Requirements and Information

§ 63.7850 What parts of the General Provisions apply to me?

Table 4 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§ 63.7851 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the United States Environmental Protection Agency (U.S. EPA), or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternative opacity emission limits in Table 1 to this subpart under §63.6(h)(9).

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90, except for approval of an alternative method for the oil content of the sinter plant feedstock or volatile organic compound measurements for the sinter plant windbox exhaust stream stack as provided in §63.7824(f).

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39588, July 13, 2006]

§ 63.7852 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in §63.2, and in this section as follows.

Bag leak detection system means a system that is capable of continuously monitoring relative particulate matter (dust) loadings in the exhaust of a baghouse to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on tribroelectric, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

Basic oxygen process furnace means any refractory-lined vessel in which high-purity oxygen is blown under pressure through a bath of molten iron, scrap metal, and fluxes to produce steel. This definition includes both top and bottom blown furnaces, but does not include argon oxygen decarburization furnaces.

Basic oxygen process furnace shop means the place where steelmaking operations that begin with the transfer of molten iron (hot metal) from the torpedo car and end prior to casting the molten steel, including hot metal transfer, desulfurization, slag skimming, refining in a basic oxygen process furnace, and ladle metallurgy occur.

Basic oxygen process furnace shop ancillary operations means the processes where hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy occur.

Blast furnace means a furnace used for the production of molten iron from iron ore and other iron bearing materials.

Bottom-blown furnace means any basic oxygen process furnace in which oxygen and other combustion gases are introduced into the bath of molten iron through tuyeres in the bottom of the vessel or through tuyeres in the bottom and sides of the vessel.

Casthouse means the building or structure that encloses the bottom portion of a blast furnace where the hot metal and slag are tapped from the furnace.

Certified observer means a visible emission observer certified to perform EPA Method 9 opacity observations.

Desulfurization means the process in which reagents such as magnesium, soda ash, and lime are injected into the hot metal, usually with dry air or nitrogen, to remove sulfur.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation (including operating limits) or operation and maintenance requirement;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Discharge end means the place where those operations conducted within the sinter plant starting at the discharge of the sintering machine's traveling grate including (but not limited to) hot sinter crushing, screening, and transfer operations occur.

Emission limitation means any emission limit, opacity limit, or operating limit.

Hot metal transfer station means the location in a basic oxygen process furnace shop where molten iron (hot metal) is transferred from a torpedo car or hot metal car used to transport hot metal from the blast furnace casthouse to a

holding vessel or ladle in the basic oxygen process furnace shop. This location also is known as the reladling station or ladle transfer station.

Integrated iron and steel manufacturing facility means an establishment engaged in the production of steel from iron ore.

Ladle metallurgy means a secondary steelmaking process that is performed typically in a ladle after initial refining in a basic oxygen process furnace to adjust or amend the chemical and/or mechanical properties of steel. This definition does not include vacuum degassing.

Primary emissions means particulate matter emissions from the basic oxygen process furnace generated during the steel production cycle which are captured and treated in the furnace's primary emission control system.

Primary emission control system means the combination of equipment used for the capture and collection of primary emissions (*e.g.,* an open hood capture system used in conjunction with an electrostatic precipitator or a closed hood system used in conjunction with a scrubber).

Primary oxygen blow means the period in the steel production cycle of a basic oxygen process furnace during which oxygen is blown through the molten iron bath by means of a lance inserted from the top of the vessel (top-blown) or through tuyeres in the bottom and/or sides of the vessel (bottom-blown).

Responsible official means responsible official as defined in §63.2.

Secondary emissions means particulate matter emissions that are not controlled by a primary emission control system, including emissions that escape from open and closed hoods, lance hole openings, and gaps or tears in ductwork to the primary emission control system.

Secondary emission control system means the combination of equipment used for the capture and collection of secondary emissions from a basic oxygen process furnace.

Sinter cooler means the apparatus used to cool the hot sinter product that is transferred from the discharge end through contact with large volumes of induced or forced draft air.

Sinter plant means the machine used to produce a fused clinker-like aggregate or sinter of fine iron-bearing materials suited for use in a blast furnace. The machine is composed of a continuous traveling grate that conveys a bed of ore fines and other finely divided iron-bearing material and fuel (typically coke breeze), a burner at the feed end of the grate for ignition, and a series of downdraft windboxes along the length of the strand to support downdraft combustion and heat sufficient to produce a fused sinter product.

Skimming station means the locations inside a basic oxygen process furnace shop where slag is removed from the top of the molten metal bath.

Steel production cycle means the operations conducted within the basic oxygen process furnace shop that are required to produce each batch of steel. The following operations are included: scrap charging, preheating (when done), hot metal charging, primary oxygen blowing, sampling, (vessel turndown and turnup), additional oxygen blowing (when done), tapping, and deslagging. The steel production cycle begins when the scrap is charged to the furnace and ends after the slag is emptied from the vessel into the slag pot.

Top-blown furnace means any basic oxygen process furnace in which oxygen is introduced into the bath of molten iron by means of an oxygen lance inserted from the top of the vessel.

Windboxes means the compartments that provide for a controlled distribution of downdraft combustion air as it is drawn through the sinter bed of a sinter plant to make the fused sinter product.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39588, July 13, 2006]

Table 1 to Subpart FFFFF of Part 63—Emission and Opacity Limits

As required in §63.7790(a), you must comply with each applicable emission and opacity limit in the following table:

For . . .	You must comply with each of the following . . .
9. Each BOPF at a new or existing shop	a. You must not cause to be discharged to the atmosphere any gases that exit from a primary emission control system for a BOPF with a closed hood system at a new or existing BOPF shop that contain, on a flow-weighted basis, particulate matter in excess of 0.03 gr/dscf during the primary oxygen blow[2][3]; and b. You must not cause to be discharged to the atmosphere any gases that exit from a primary emission control system for a BOPF with an open hood system that contain, on a flow-weighted basis, particulate matter in excess of 0.02 gr/dscf during the steel production cycle for an existing BOPF shop[2][3]or 0.01 gr/dscf during the steel production cycle for a new BOPF shop[3]; and c. You must not cause to be discharged to the atmosphere any gases that exit from a control device used solely for the collection of secondary emissions from the BOPF that contain particulate matter in excess of 0.01 gr/dscf for an existing BOPF shop[2]or 0.0052 gr/dscf for a new BOPF shop
10. Each hot metal transfer, skimming, and desulfurization operation at a new or existing BOPF shop	You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain particulate matter in excess of 0.01 gr/dscf for an existing BOPF shop[2]or 0.003 gr/dscf for a new BOPF shop.
11. Each ladle metallurgy operation at a new or existing BOPF shop	You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain particulate matter in excess of 0.01 gr/dscf for an existing BOPF shop[2]or 0.004 gr/dscf for a new BOPF shop.
12. Each roof monitoring at an existing BOPF shop	You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the BOPF shop or any other building housing the BOPF or BOPF shop operation that exhibit opacity greater than 20 percent (3-minute average).

[2]This concentration limit (gr/dscf) for a control device does not apply to discharges inside a building or structure housing the discharge end at an existing sinter plant, inside a casthouse at an existing blast furnace, or inside an existing BOPF shop if the control device was installed before August 30, 2005.
[3]This limit applies to control devices operated in parallel for a single BOPF during the oxygen blow.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39588, July 13, 2006]

Table 2 to Subpart FFFFF of Part 63—Initial Compliance with Emission and Opacity Limits

As required in §63.7825(a)(1), you must demonstrate initial compliance with the emission and opacity limits according to the following table:

For . . .	You have demonstrated initial compliance if . . .
9. Each BOPF at a new or existing BOPF shop	a. The average concentration of particulate matter from a primary emission control system applied to emissions from a BOPF with a closed hood system, measured according to the performance test procedures in §63.7822(f), did not exceed 0.03 gr/dscf for a new or existing BOPF shop; b. The average concentration of particulate matter from a primary emission control system applied to emissions from a BOPF with an open hood system, measured according to the performance test procedures in §63.7822(g), did not exceed 0.02 gr/dscf for an existing BOPF shop or 0.01 gr/dscf for a new BOPF shop; and c. The average concentration of particulate matter from a control device applied solely to secondary emissions from a BOPF, measured according to the performance test procedures in §63.7822(g), did not exceed 0.01 gr/dscf for an existing BOPF shop or 0.0052 gr/dscf for a new BOPF shop.
10. Each hot metal transfer skimming, and desulfurization at a new or existing BOPF shop	The average concentration of particulate matter from a control device applied to emissions from hot metal transfer, skimming, or desulfurization, measured according to the performance test procedures in §63.7822(h), did not exceed 0.01 gr/dscf for an existing BOPF shop or 0.003 gr/dscf for a new BOPF shop.
11. Each ladle metallurgy operation at a new or existing BOPF shop	The average concentration of particulate matter from a control device applied to emissions from a ladle metallurgy operation, measured according to the performance test procedures in §63.7822(h), did not exceed 0.01 gr/dscf for an existing BOPF shop or 0.004 gr/dscf for a new BOPF shop.
12. Each roof monitor at an existing BOPF shop	The opacity of secondary emissions from each BOPF shop, determined according to the performance test procedures in §63.7823(d), did not exceed 20 percent (3-minute average).

[68 FR 27663, May 20, 2003, as amended at 71 FR 39589, July 13, 2006]

Table 3 to Subpart FFFFF of Part 63—Continuous Compliance With Emission and Opacity Limits

As required in §63.7833(a), you must demonstrate continuous compliance with the emission and opacity limits according to the following table:

For . . .	You must demonstrate continuous compliance by . . .
9. Each BOPF at a new or existing BOPF shop	a. Maintaining emissions of particulate matter from the primary control system for a BOPF with a closed hood system at or below 0.03 gr/dscf; and b. Maintaining emissions of particulate matter from the primary control system for a BOPF with an open hood system at or below 0.02 gr/dscf for an existing BOPF shop or 0.01 gr/dscf for a new BOPF shop; and c. Maintaining emissions of particulate matter from a control device applied solely to secondary emissions from a BOPF at or below 0.01 gr/dscf for an existing BOPF shop or 0.0052 gr/dscf for a new BOPF shop; and d. Conducting subsequent performance tests at the frequencies specified in §63.7821.
10. Each hot metal transfer, skimming, and desulfurization operation at a new or existing BOPF shop	b. Conducting subsequent performance tests at the frequencies specified in §63.7821.
11. Each ladle metallurgy operation at a new or existing BOPF shop	a. Maintaining emissions of particulate matter from a control device at or below 0.01 gr/dscf at an existing BOPF shop or 0.004 gr/dscf for a new BOPF shop; and b. Conducting subsequent performance tests at the frequencies specified in §63.7821.
12. Each roof monitor at an existing BOPF shop	a. Maintaining the opacity of secondary emissions that exit any opening in the BOPF shop or other building housing the BOPF shop or shop operation at or below 20 percent (3-minute average); and b. Conducting subsequent performance tests at the frequencies specified in §63.7821.

[71 FR 39590, July 13, 2006]

Table 4 to Subpart FFFFF of Part 63—Applicability of General Provisions to Subpart FFFFF

As required in §63.7850, you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) shown in the following table:

Citation	Subject	Applies to Subpart FFFFF	Explanation
§63.1	Applicability	Yes.	
§63.2	Definitions	Yes.	
§63.3	Units and Abbreviations	Yes.	
§63.4	Prohibited Activities	Yes.	
§63.5	Construction/Reconstruction	Yes.	
§63.6(a), (b), (c), (d), (e), (f), (g), (h)(2)(ii)–(h)(9)	Compliance with Standards and Maintenance Requirements	Yes.	
§63.6(h)(2)(i)	Determining Compliance with Opacity and VE Standards	No	Subpart FFFFF specifies methods and procedures for determining compliance with opacity emission and operating limits.
§63.6(i)	Extension of Compliance with Emission Standards	Yes	
§63.6(j)	Exemption from Compliance with Emission Standards	Yes	
§63.7(a)(1)–(2)	Applicability and Performance Test Dates	No	Subpart FFFFF and specifies performance test applicability and dates.
§63.7(a)(3), (b), (c)–(h)	Performance Testing Requirements	Yes	
§63.8(a)(1)–(3), (b), (c)(1)–(3), (c)(4)(i)–(ii), (c)(5)–(6), (c)(7)–(8), (f)(1)–(5), (g)(1)–(4)	Monitoring Requirements	Yes	CMS requirements in §§63.8(c)(4)(i)–(ii), (c)(5)–(6), (d), and (e) apply only to COMS.
§63.8(a)(4)	Additional Monitoring Requirements for Control Devices in §63.11	No	Subpart FFFFF does not require flares.
§63.8(c)(4)	Continuous Monitoring System Requirements	No	Subpart FFFFF specifies requirements for operation of CMS.
§63.8(f)(6)	RATA Alternative	No	

Citation	Subject	Applies to Subpart FFFFF	Explanation
§63.8(g)(5)	Data Reduction	No	Subpart FFFFF specifies data reduction requirements.
§63.9	Notification Requirements	Yes	Additional notifications for CMS in §63.9(g) apply only to COMS.
§63.10(a), (b)(1), (b)(2)(i)–(xii), (b)(2)(xiv), (b)(3), (c)(1)–(6), (c)(9)–(15), (d), (e)(1)–(2), (e)(4), (f)	Recordkeeping and Reporting Requirements	Yes	Additional records for CMS in §63.10(c)(1)–(6), (9)–(15), and reports in §63.10(d)(1)–(2) apply only to COMS.
§63.10(b)(2) (xiii)	CMS Records for RATA Alternative	No	
§63.10(c)(7)–(8)	Records of Excess Emissions and Parameter Monitoring Exceedances for CMS	No	Subpart FFFFF specifies record requirements.
§63.10(e)(3)	Excess Emission Reports	No	Subpart FFFFF specifies reporting requirements
§63.11	Control Device Requirements	No	Subpart FFFFF does not require flares.
§63.12	State Authority and Delegations	Yes.	
§63.13–§63.15	Addresses, Incorporation by Reference, Availability of Information	Yes.	

[68 FR 27663, May 20, 2003, as amended at 71 FR 39591, July 13, 2006]

SECTION D.9 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Number 2 Q-BOP Shop

(a) Two (2) Hot Metal Transfer and Desulfurization Stations, identified as NSDS0246, constructed in 1987, with a maximum capacity of 510 tons per hour. These stations included: two (2) Hot Metal Mixers, identified as NSMM0264 and two (2) Hot Metal Mixer Heaters, identified as NSMH0251, constructed in 1973, with a maximum capacity of 255 tons per hour. The natural gas fired mixer heaters have a heat input capacity of 10 MMBtu/hr each. Emissions from the hot metal transfer and desulfurization stations, mixers and heaters are controlled by the Hot Metal Transfer and Desulfurization Stations Baghouse NS3115 that discharges through NS614. The uncontrolled emissions exhaust through roof monitor NS6631.

(b) Q-Basic Oxygen Process (BOP) vessels, constructed in 1973, consisting of BOP vessel T identified as NSVT0268, vessel W, identified as NSVW0269, and vessel Y, identified as NSVY0270, with a maximum capacity of 250 tons per hour each. Primary emissions are controlled by open combustion hood and two (2) Gas Cleaning Systems, secondary emissions are controlled by the Secondary Emissions Baghouse NS3124, exhausting to stack NS6123, and uncontrolled emissions exhaust through Roof Monitor NS6632.

(c) Two (2) Gas Cleaning Systems, identified as NS3125 and NS3126 located in the gas cleaner facility, constructed in 1973, process the exhaust gases from the three (3) steel making vessels through three (3) quenchers, two (2) scuppers (tank like structures that remove excess quench water and solids from the gas stream), two (2) venturi scrubbers, two (2) separators, two (2) gas coolers with mist eliminators, and two (2) induced draft fans exhausting to Stacks NS6124 and NS6125.

(d) Three (3) Flux Bins T, W, and Y, identified as NSVT0265, NSVW0266 and NSVY0267, constructed in 1973, with a maximum capacity of 141 tons per hour each. Emissions are controlled by five (5) baghouses. Three (3) Flux Transfer Baghouses at 166' level identified as NS3112, NS3108, and NS3107, exhausting through Stacks NS6623, NS6627and NS6628 recycling captured material back to the process; One (1) North Flux Handling Baghouse at 116' level identified as NS3109 and one (1) South Flux Handling Baghouse at 116' level identified as NS3110, exhausting through stacks NS6626 and NS6625. Uncontrolled emissions exhaust through the roof monitor NS6632.

(e) Three (3) Ladle Metallurgical Facilities, LMF1 identified as NSL10293, LMF 2 identified as NSL20294 were constructed in 1986 and LMF 3 identified as NSL30295, constructed in 1991 with a maximum capacity of 348 tons per hour each. Hot fume emissions from LMF 1 and 2 are controlled by Nos. 1 and 2 LMF Hot Fume Exhaust Baghouses NS3135 and NS3136, exhausting through stacks NS6146 and NS6147. Material handling emissions at LMF 1 and 2 are controlled by the LMF Nos. 1 and 2 Material Handling Baghouse NS3052, exhausting through stack NS6055. The LMF 3 Hot Fume Exhaust and Material Handling emissions are controlled by the LMF 3 Hot Fume and Material Handling Baghouse NS3137, exhausting to stack NS6148. All uncontrolled emissions exhaust through the roof monitor NS6634.

(f) One (1) R-H Vacuum Degasser, identified as NSVD0271, constructed in 1989, with a maximum capacity of 297.1 tons of steel per hour consisting of two (2) natural gas fired heaters, one (1) active and one (1) spare, identified as NSAB0276 and NSSB0275, with heat input capacities of 12 MMBtu per hour and 3 MMBtu per hour, respectively. Carbon monoxide and other combustible gas emissions are controlled with a flare that exhausts through Stack NS6145 and uncontrolled emissions exhaust through the Roof Monitor NS6634.

(g) One (1) Slag Conditioning Station servicing the RH Vacuum Degasser, constructed in 1997, with a maximum capacity of 297.1 tons of steel per hour.

(1) PM_{10} emissions from the station are controlled by a baghouse exhausting through Stacks S-1 through S-6 and recycling captured material back to the process.

(2) PM_{10} emissions from the material handling of slag conditioning and metallurgical agents are exhausted through the RH Vacuum Degasser Slag Conditioning Baghouse NS3207, exhausting through Stack NS6636.

(h) One (1) Daytank Lime Silo at the lime dumping station, identified as NSDS0250 constructed in 1971. Emissions are controlled by the Daytank Lime Silo baghouse NS3106, exhausting through the stack, NS6629.

(i) Three (3) Continuous Casting Lines, identified as Lines A, B and C identified as, NCCA0284, NCCB0285 and NCCC0286, with a total maximum capacity of 800 tons per hour combined. Lines A and B were constructed in 1986. Line C was constructed in 1991. Emissions from the continuous casters go to the Roof Monitor NC6635.

(j) Fourteen (14) natural gas fired Ladle Preheaters, identified as NBLD0262, eleven (11) with a heat input capacity of 9 MMBtu per hour each and three (3) with a heat input of 10 MMBtu per hour each. Emissions go through Roof Monitor NS6633.

(k) Two (2) Hot Metal Ladle Skimmers, identified as NSLS0248, constructed in 1973. Emissions go through Roof Monitor NS6631.

(l) Two (2) Steel Slag Skimming Stations, consisting of slag skimmers, identified as NSS10292 and NSS20287. Both were constructed in 1973. Emissions go through Roof Monitor NS6633.

(m) One (1) Slingot Station, identified as NSST0290, constructed in 1986. Emissions go through Roof Monitor NS6634.

(n) Eight (8) natural gas fired Tundish Preheaters located at the No. 2 Caster, with a heat input capacity of 6 MMBtu per hour each. Emissions go through Roof Monitor NC6635.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.9.1 General Provisions Relating to Hazardous Air Pollutants (HAPs) [326 IAC 20-1][40 CFR 63, Subpart A] [Table 4 to 40 CFR 63, Subpart FFFFF]

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the affected sources, No. 2 QBOP Shop, including the Q-BOP Furnace, and shop ancillary operations (hot metal mixers, hot metal desulfurization, slag skimming, ladle metallurgy, and roof monitoring, except when otherwise specified by Table 4 to 40 CFR 63, Subpart FFFFF.

D.9.2 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38]

Pursuant to 326 IAC 6.8-2-38, the PM_{10} emissions from the Number 2 Q-BOP Shop operations shall comply with the following:

(a) The PM_{10} emissions from the Number 2 Q-BOP Hot Metal Transfer and Desulfurization Baghouses discharge NS6144 shall not exceed to 0.007 grains per dry standard cubic foot of exhaust air and 13.0 pounds per hour.

(b) The PM_{10} emissions from the Number 2 Q-BOP Secondary Emissions Baghouse stack NS6123 shall not exceed 0.007 grains per dry standard cubic foot of exhaust air and 27.0 pounds per hour.

(c) The PM_{10} emissions from the Number 2 Q-BOP Gas Cleaning System stacks NS6124 and NS6125 shall not exceed 0.0153 grains per dry standard cubic foot of exhaust air and a total of 44.40 pounds per hour.

(d) The PM_{10} emissions from the Number 2 Q-BOP North Flux Handling System Baghouse stack NS6626 shall not exceed to 0.0070 grains per dry standard cubic foot of exhaust air and 1.80 pounds per hour.

(e) The emissions from the Number 2 Q-BOP South Flux Handling System Baghouse stack NS6625, shall not exceed 0.0070 grains per dry standard cubic foot of exhaust air and 1.80 pounds per hour.

(f) The PM_{10} emissions from the Number 2 Q-BOP LMF Number 1 Hot Fume Exhaust Baghouse Stack NS6146 shall not exceed 0.007 grains per dry standard cubic foot of exhaust air and 5.1 pounds per hour.

(g) The PM_{10} emissions from the Number 2 Q-BOP LMF Number 2 Hot Fume Exhaust Baghouse Stack NS6147 shall not exceed 0.007 grains per dry standard cubic foot of exhaust air and 5.1 pounds per hour.

(h) The PM_{10} emissions from the Number 2 Q-BOP LMF Number 3 Hot Fume Exhaust and Material Handling Baghouse Stack NS6148 shall not exceed 0 .0070 grains per dry standard cubic foot of exhaust air and 2.70 pounds per hour.

(i) The PM_{10} emissions from the Number 2 Q-BOP LMF Numbers 1 and 2 Material Handling Baghouse Stack NS6055, shall not exceed 0 .007 grains per dry standard cubic foot of exhaust air and 3.83 pounds per hour.

(j) The PM_{10} emissions from the Number 2 Q-BOP RH Vacuum Degasser Slag Conditioning Baghouse stacks S-1 through S-6 shall not exceed 0.007 grains per dry standard cubic foot of exhaust air and 5.49 pounds per hour.

(k) Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emissions limitations apply to one (1) stack serving the multiple units specified when the facility description notes stack serving, and to each stack of multiple stacks serving multiple facilities when the facility description notes each stack serving.

D.9.3 Particulate Emissions Limitations [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), the particulate emissions from the roof monitors NS6631, NS6632, NS6633 and NS6634 shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

D.9.4 Lake County Opacity Limitations [326 IAC 6.8-3-4]

Pursuant to 326 IAC 6.8-3-4 the visible emissions from the Number 2 Q-BOP Shop operations shall be limited as follows:

(a) Opacity from the Number 2 Q-BOP Hot Metal Transfer and Desulfurization Stations Baghouse stack NS6144 shall not exceed five percent (5%) for any three (3) minute average.

(b) Opacity from the Number 2 Q-BOP Gas Cleaning system stacks NS6124 and NS6125 shall not exceed twenty percent (20%) for any six (6) minute average.

(c) Opacity from the Number 2 Q-BOP Roof Monitor NS 6632 shall not exceed twenty percent (20%) for any three (3) minute average.

(d) Opacity from the Number 2 Q-BOP North and South Flux Handling System Baghouse stacks NS6626 and NS6625, (previously known as the flux handling line baghouse shall not exceed five percent (5%) for any three (3) minute average.

(e) Opacity from the Number 2 Q-BOP Secondary Baghouse stack NS6123 shall not exceed five percent (5%) for any three (3) minute average.

(f) Opacity from the Number 2 Q-BOP LMF No. 1 Hot Fume Exhaust Baghouse stack NS6146 shall not exceed five percent (5%) for any three (3) minute average.

(g) Opacity from the Number 2 Q-BOP LMF No. 2 Hot Fume Exhaust Baghouse stack NS6147 shall not exceed five percent (5%) for any, three (3) minute average.

D.9.5 Sulfur Dioxide (SO_2) Limitations [326 IC 7-4.1-20(c)(3)]

Pursuant to 326 IAC 7-4.1-20(c)(3) gaseous fuel sources shall burn natural gas only:

(a) if it is not listed in 326 IAC 7-4.1-20; or

(b) under an operating condition not specifically listed in 326 IAC 7-4.1-20.

D.9.6 Sulfur Dioxide (SO_2 Limitations – Hot Metal Transfer and Desulfurization Stations [326 IAC 7-4.1-20]

(a) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, the Permittee shall comply with the following:

(1) The SO_2 emissions from the Hot Metal Transfer and Desulfurization Stations baghouse as measured during all hot metal processing activities shall not exceed 0.05 pound per ton of hot metal. Hot metal processing will include hot metal transfer, hot metal desulfurization reagent injection and hot metal skimming, as applicable.

(2) The SO_2 emissions from the Hot Metal Transfer and Desulfurization Stations Baghouse as measured during hot metal desulfurization reagent injection only shall not exceed 0.01 pound per ton of hot metal.

(b) Pursuant to 326 IAC 7-4.1-20(a)(1)(L) and (b)(10), the SO_2 emissions from the No. 2 QBOP Shop Hot Metal Transfer and Desulfurization Stations Baghouse shall not exceed 0.05 pounds per ton of hot metal and 28.54 pounds per hour.

D.9.7 Carbon Monoxide (CO) Limitations 326 IAC 9-1-2

Pursuant to 326 IAC 9-1-2(2), no carbon monoxide shall be discharged from the Number 2 Q-BOP furnace waste gas stream, unless the gas stream is burned in one of the following: a direct-flame afterburner, boiler or recuperative incinerator. In instances where carbon monoxide destruction is not required, carbon monoxide emissions shall be released at such elevation that

the maximum ground level concentration from a single source shall not exceed twenty percent (20%) of the maximum ground one hour Indiana ambient air quality value for carbon monoxide.

D.9.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and any associated control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.9.9 Particulate Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) Not later than thirty (30) months after issuance of this permit (Permit No. T089-7663-00121) or five (5) years from the date of the most recent compliance test which ever is earlier, in order to demonstrate compliance with Condition D.9.2, the Permittee shall perform PM_{10} testing on the Number 2 Q-BOP Hot Metal Transfer and Desulfurization Stations Baghouse discharge using the appropriate methods to measure PM_{10} as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

(b) Not later than thirty (30) months after issuance of this permit (Permit No. T089-7663-00121) or two and one half (2 ½) years from the date of the most recent compliance test which ever is earlier, in order to demonstrate compliance with Condition D.9.2, the Permittee shall perform PM_{10} testing on the Number 2 Q-BOP Gas Cleaning System stacks NS6124 and NS6125 using the appropriate methods to measure PM_{10} as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

(c) Not later than thirty (30) months after issuance of this permit (Permit No. T089-7663-00121) or two and one half (2 ½) years from the date of the most recent compliance test which ever is earlier, in order to demonstrate compliance with Condition D.9.2 the Permittee shall perform PM_{10} testing on the Number 2 Q-BOP Secondary Emissions Baghouse Stack NS6123, using the appropriate methods to measure PM_{10} as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration

(d) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation wtih regard to the performance testing required by this condition.

D.9.10 Sulfur Dioxide (SO_2) Testing Requirements

(a) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004 , within thirty (30) months after issuance of this permit (Permit No. T089-7663-00121) or two and one-half (2 ½) years from the date of the most recent valid compliance test whichever is earlier or an alternative date as determined by OAQ, Compliance Data Section, the Permittee shall perform SO_2 emission testing on the No. 2 QBOP Shop Hot Metal Transfer and Desulfurization Stations Baghouse discharge during hot metal transfer, hot metal desulfurization, reagent injection and hot metal skimming operations, utilizing the test protocol submitted in accordance with the U.S. EPA Administrative Consent Order, issued January 2, 2004, to show compliance with condition D.9.7(a). This test shall be repeated at least once every two and one-half (2 ½) years from the date of the most recent valid compliance demonstration.

(b) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, within thirty (30) months after issuance of this permit (Permit No. T089-7663-00121) or two and one-half (2 ½) years from the date of the most recent valid compliance test whichever is earlier or an alternative date as determined by OAQ, Compliance Data Section, the Permittee shall perform SO_2 emission testing on the No. 2 QBOP Shop Hot Metal Transfer and desulfurization station baghouse discharge during reagent injection operations only utilizing a test method approved by the Commissioner to show compliance with condition D.9.6(b) during the desulfurization reagent injection only. This test shall be repeated at least once every two and one-half (2 ½) years from the date of the most recent valid compliance demonstration.

(c) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, demonstration of compliance by performance testing per D.9.10(b) above shall not fulfill the compliance demonstration requirement for D.9.10(a).

(d) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation wtih regard to the performance testing required by this condition.

D.9.11 Particulate Matter Control [326 IAC 2-7-6(6)]

(a) Except as otherwise provided by statute, rule or this permit, the control devices listed below shall be in operation for particulate emissions control at all times the associated operations at the No. 2 Q-BOP Shop are in operation. The control devices are as follows:

(1) Hot Metal Transfer and Desulfurization Baghouse NS3115

(2) No. 2 QBOP Secondary Emissions Baghouse NS3124

(3) The two (2) No. 2 QBOP Gas Cleaning Systems NS3125 and NS3126

(4) No. 1 LMF Hot Fume Exhaust Baghouse NS3135

(5) No. 2 LMF Hot Fume Exhaust Baghouse NS3136

(6) No. 1 and No. 2 LMF Material Handling Baghouse NS3052

(7) No. 3 LMF Hot Fume and Material Handling Baghouse NS3137

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.9.12 Carbon Monoxide (CO) Control

The R-H Vacuum Degasser Flare NS6145 shall be in operation at all times the R-H Vacuum Degasser is in operation to control the CO emissions.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

D.9.13 Visible Emissions Notations

(a) Visible emission notations of the Desulfurization Stations baghouse stack NS6144, Secondary Baghouse stack NS6123 and No. 2 Q-BOP Gas Cleaning System Stacks NS6124 and NS6125, shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation of this permit.

(f) The Permittee shall comply with the most current Continuous Compliance Plan visible emission evaluation program. Section C - Continuous Compliance Plan contains the Permittee's obligation with regard to the visible emission evaluation program required by this condition.

D.9.14 Parametric Monitoring

(a) The Permittee shall record the pressure drop across the No. 2 QBOP Secondary Emissions baghouse NS3124 used in conjunction with the secondary emissions from the three (3) Q-BOP vessels T, W, and Y, at least once per day, when any of the three (3) Q-BOP vessels T, W, and Y, is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2 and 10 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation of this permit.

(b) The Permittee shall record the pressure drop across the venture scrubber throats and scrubber total supply water flow rate of the No. 2 Q-BOP gas cleaning Systems scrubbers NS3125 and NS3126 used in conjunction with the 3 No. 2 Q-BOP vessels at least once per day when either the three (3) Q-BOP vessels T, W, and Y units is operating. For each scrubber system, when for any one reading across the venture scrubber throats is outside the normal range of 50 to 70 inches of water or the scrubber supply water flow rate is outside the normal range of 2,000 and 4,500 gallons per minute (gpm) or ranges established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A reading that is outside the above mentioned ranges for respective parameters is not a deviation from this permit. Failure to take response steps shall be considered a deviation of this permit.

(c) The Permittee shall record the pressure drop across the Hot Metal Desulfurization baghouse NS3115 used in conjunction with the No, 2 Q-BOP Hot Metal Desulfurization stations and mixers, at least once per day when the desulfurization stations and mixers are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is

outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation of this permit.

(d) The Permittee shall comply with the most current Continuous Compliance Plan for the baghouse operation, recording and maintenance. Section C - Continuous Compliance Plan contains the Permittee's obligation with regard to the baghouse operation, recording and maintenance required by this condition.

(e) The instrument used for determining the pressure and flow rate shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.9.15 Scrubber Failure Detection

In the event that a scrubber failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.9.16 General Record Keeping Requirements

(a) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, and to document the compliance status with Condition D.9.6, the Permittee shall keep records of the monthly hot metal throughput for the No. 1 and No. 2 Hot Metal Desulfurization Stations.

(b) To document the compliance status with Condition D.9.13 the Permittee shall maintain the records of once per day visible emission notations of the Hot Metal Transfer and Desulfurization Stations baghouse discharge NS6144, No. 2 QBOP Secondary Emissions Baghouse Stack NS6123, and No. 2 Q-BOP Gas Cleaning System Stacks NS6124 and NS6125 exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(c) To document the compliance status with Condition D.9.14, the Permittee shall maintain records of the once per day of the pressure drop of the No. 2 QBOP secondary emissions baghouse NS3124, pressure drop across the venturi scrubber throats and supply water flow rate of the No. 2 QBOP Gas cleaning systems scrubbers NS3125 and NS3126, and pressure drop of the Hot Metal Transfer and Desulfurization baghouse NS3115, during normal operation. The Permittee shall include in its daily record when a pressure drop reading and/or flow rate reading is not taken and the reason for the lack of pressure drop reading and/or flow rate reading (e.g. the process did not operate that day).

(d) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel manufacturing [40 CFR 63, Subpart FFFFF]

D.9.17 National Emission Standards for Hazardous Air Pollutants (NESHAP) from Integrated Iron and Steel manufacturing – Basic Oxygen Process Furnaces (BOPF) [40 CFR 63, Subpart FFFFF]

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart FFFFF—National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities

Source: 68 FR 27663, May 20, 2003, unless otherwise noted.

What This Subpart Covers

§ 63.7780 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for integrated iron and steel manufacturing facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with all applicable emission limitations and operation and maintenance requirements in this subpart.

§ 63.7781 Am I subject to this subpart?

You are subject to this subpart if you own or operate an integrated iron and steel manufacturing facility that is (or is part of) a major source of hazardous air pollutants (HAP) emissions. Your integrated iron and steel manufacturing facility is a major source of HAP if it emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

§ 63.7782 What parts of my plant does this subpart cover?

(a) This subpart applies to each new and existing affected source at your integrated iron and steel manufacturing facility.

(b) The affected sources are each new or existing sinter plant, blast furnace, and basic oxygen process furnace (BOPF) shop at your integrated iron and steel manufacturing facility.

(c) This subpart covers emissions from the sinter plant windbox exhaust, discharge end, and sinter cooler; the blast furnace casthouse; and the BOPF shop including each individual BOPF and shop ancillary operations (hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy).

(d) A sinter plant, blast furnace, or BOPF shop at your integrated iron and steel manufacturing facility is existing if you commenced construction or reconstruction of the affected source before July 13, 2001.

(e) A sinter plant, blast furnace, or BOPF shop at your integrated iron and steel manufacturing facility is new if you commence construction or reconstruction of the affected source on or after July 13, 2001. An affected source is reconstructed if it meets the definition of reconstruction in §63.2.

§ 63.7783 When do I have to comply with this subpart?

(a) If you have an existing affected source, you must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to you by the dates specified in paragraphs (a)(1) and (2) of this section.

(1) No later than May 22, 2006 for all emissions sources at an existing affected source except for a sinter cooler at an existing sinter plant.

(d) If your integrated iron and steel manufacturing facility is not a major source and becomes a major source of HAP, the following compliance dates apply to you.

(1) Any portion of the existing integrated iron and steel manufacturing facility that becomes a new affected source or a new reconstructed source must be in compliance with this subpart upon startup.

(2) All other parts of the integrated iron and steel manufacturing facility must be in compliance with this subpart no later than 2 years after it becomes a major source.

(e) You must meet the notification and schedule requirements in §63.7840. Several of these notifications must be submitted before the compliance date for your affected source.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39585, July 13, 2006]

Emission Limitations

§ 63.7790 What emission limitations must I meet?

(a) You must meet each emission limit and opacity limit in Table 1 to this subpart that applies to you.

(b) You must meet each operating limit for capture systems and control devices in paragraphs (b)(1) through (3) of this section that applies to you.

(1) You must operate each capture system applied to emissions from a sinter plant discharge end or blast furnace casthouse or to secondary emissions from a BOPF at or above the lowest value or settings established for the operating limits in your operation and maintenance plan;

(2) For each venturi scrubber applied to meet any particulate emission limit in Table 1 to this subpart, you must maintain the hourly average pressure drop and scrubber water flow rate at or above the minimum levels established during the initial performance test.

(3) For each electrostatic precipitator applied to emissions from a BOPF, you must maintain the hourly average opacity of emissions exiting the control device at or below 10 percent.

(c) An owner or operator who uses an air pollution control device other than a baghouse, venturi scrubber, or electrostatic precipitator must submit a description of the device; test results collected in accordance with §63.7822 verifying the performance of the device for reducing emissions of particulate matter to the atmosphere to the levels required by this subpart; a copy of the operation and maintenance plan required in §63.7800(b); and appropriate operating parameters that will be monitored to maintain continuous compliance with the applicable emission limitation(s). The monitoring plan identifying the operating parameters to be monitored is subject to approval by the Administrator.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39585, July 13, 2006]

Operation and Maintenance Requirements

§ 63.7800 What are my operation and maintenance requirements?

(a) As required by §63.6(e)(1)(i), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.

(b) You must prepare and operate at all times according to a written operation and maintenance plan for each capture system or control device subject to an operating limit in §63.7790(b). Each plan must address the elements in paragraphs (b)(1) through (7) of this section.

(1) Monthly inspections of the equipment that is important to the performance of the total capture system (*e.g.,* pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (*e.g.,* presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in the ductwork, and fan erosion). The operation and maintenance plan also must include requirements to repair any defect or deficiency in the capture system before the next scheduled inspection.

(2) Preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

(3) Operating limits for each capture system applied to emissions from a sinter plant discharge end or blast furnace casthouse, or to secondary emissions from a BOPF. You must establish the operating limits according to the requirements in paragraphs (b)(3)(i) through (iii) of this section.

(i) Select operating limit parameters appropriate for the capture system design that are representative and reliable indicators of the performance of the capture system. At a minimum, you must use appropriate operating limit parameters that indicate the level of the ventilation draft and the damper position settings for the capture system when operating to collect emissions, including revised settings for seasonal variations. Appropriate operating limit parameters for ventilation draft include, but are not limited to, volumetric flow rate through each separately ducted hood, total volumetric flow rate at the inlet to the control device to which the capture system is vented, fan motor amperage, or static pressure.

(ii) For each operating limit parameter selected in paragraph (b)(3)(i) of this section, designate the value or setting for the parameter at which the capture system operates during the process operation. If your operation allows for more than one process to be operating simultaneously, designate the value or setting for the parameter at which the capture system operates during each possible configuration that you may operate.

(iii) Include documentation in your plan to support your selection of the operating limits established for the capture system. This documentation must include a description of the capture system design, a description of the capture system operating during production, a description of each selected operating limit parameter, a rationale for why you chose the parameter, a description of the method used to monitor the parameter according to the requirements of §63.7830(a), and the data used to set the value or setting for the parameter for each of your process configurations.

(4) Corrective action procedures for baghouses equipped with bag leak detection systems or continuous opacity monitoring systems (COMS). In the event a bag leak detection system alarm is triggered or emissions from a baghouse equipped with a COMS exceed an hourly average opacity of 5 percent, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Corrective actions may include, but are not limited to:

(i) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media or otherwise repairing the control device.

(iv) Sealing off a defective baghouse compartment.

(v) Cleaning the bag leak detection system probe, or otherwise repair the bag leak detection system.

(vi) Shutting down the process producing the particulate emissions.

(5) Corrective action procedures for venturi scrubbers equipped with continuous parameter monitoring systems (CPMS). In the event a venturi scrubber exceeds the operating limit in §63.7790(b)(2), you must take corrective actions consistent with your site-specific monitoring plan in accordance with §63.7831(a).

(6) Corrective action procedures for electrostatic precipitators equipped with COMS. In the event an electrostatic precipitator exceeds the operating limit in §63.7790(b)(3), you must take corrective actions consistent with your site-specific monitoring plan in accordance with §63.7831(a).

[68 FR 27663, May 20, 2003, as amended at 71 FR 39585, July 13, 2006]

General Compliance Requirements

§ 63.7810 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in §63.2.

(b) During the period between the compliance date specified for your affected source in §63.7783 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(c) You must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3).

[68 FR 27663, May 20, 2003, as amended at 71 FR 20468, Apr. 20, 2006]

Initial Compliance Requirements

§ 63.7820 By what date must I conduct performance tests or other initial compliance demonstrations?

(a) You must conduct a performance test to demonstrate initial compliance with each emission and opacity limit in Table 1 to this subpart that applies to you. You must also conduct a performance test to demonstrate initial compliance with the 30-day rolling average operating limit for the oil content of the sinter plant feedstock in §63.7790(d)(1) or alternative limit for volatile organic compound emissions from the sinter plant windbox exhaust stream in §63.7790(d)(2). You must conduct the performance tests within 180 calendar days after the compliance date that is specified in §63.7783 for your affected source and report the results in your notification of compliance status.

(b) For each operation and maintenance requirement that applies to you where initial compliance is not demonstrated using a performance test or opacity observation, you must demonstrate initial compliance within 30 calendar days after the compliance date that is specified for your affected source in §63.7783.

§ 63.7821 When must I conduct subsequent performance tests?

(a) You must conduct subsequent performance tests to demonstrate compliance with all applicable PM and opacity limits in Table 1 to this subpart at the frequencies specified in paragraphs (b) through (d) of this section.

(b) For each sinter cooler at an existing sinter plant and each emissions unit equipped with a control device other than a baghouse, you must conduct subsequent performance tests no less frequently than twice (at mid-term and renewal) during each term of your title V operating permit.

(c) For each emissions unit equipped with a baghouse, you must conduct subsequent performance tests no less frequently than once during each term of your title V operating permit.

(d) For sources without a title V operating permit, you must conduct subsequent performance tests every 2.5 years.

[71 FR 39586, July 13, 2006]

§ 63.7822 What test methods and other procedures must I use to demonstrate initial compliance with the emission limits for particulate matter?

(a) You must conduct each performance test that applies to your affected source according to the requirements in §63.7(e)(1) and the conditions detailed in paragraphs (b) through (i) of this section.

(b) To determine compliance with the applicable emission limit for particulate matter in Table 1 to this subpart, follow the test methods and procedures in paragraphs (b)(1) and (2) of this section.

(1) Determine the concentration of particulate matter according to the following test methods in appendix A to part 60 of this chapter:

(i) Method 1 to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 5, 5D, or 17, as applicable, to determine the concentration of particulate matter (front half filterable catch only).

(2) Collect a minimum sample volume of 60 dry standard cubic feet (dscf) of gas during each particulate matter test run. Three valid test runs are needed to comprise a performance test.

K = Conversion factor, 7,000 grains per pound (gr/lb).

(d) If you apply two or more control devices in parallel to emissions from a sinter plant discharge end or a BOPF, compute the average flow-weighted concentration for each test run using Equation 2 of this section as follows:

$$C_W = \frac{\sum_{i=1}^{n} C_i Q_i}{\sum_{i=1}^{n} Q_i} \qquad \text{(Eq. 2)}$$

Where:

C_w= Flow-weighted concentration, gr/dscf;

C_i= Concentration of particulate matter from exhaust stream “i”, gr/dscf; and

Q_i= Volumetric flow rate of effluent gas from exhaust stream “i”, dry standard cubic foot per minute (dscfm).

(f) For a primary emission control device applied to emissions from a BOPF with a closed hood system, sample only during the primary oxygen blow and do not sample during any subsequent reblows. Continue sampling for each run for an integral number of primary oxygen blows.

(g) For a primary emission control system applied to emissions from a BOPF with an open hood system and for a control device applied solely to secondary emissions from a BOPF, you must complete the requirements of paragraphs (g)(1) and (2) of this section:

(1) Sample only during the steel production cycle. Conduct sampling under conditions that are representative of normal operation. Record the start and end time of each steel production cycle and each period of abnormal operation; and

(2) Sample for an integral number of steel production cycles. The steel production cycle begins when the scrap is charged to the furnace and ends 3 minutes after the slag is emptied from the vessel into the slag pot.

(h) For a control device applied to emissions from BOPF shop ancillary operations (hot metal transfer, skimming, desulfurization, or ladle metallurgy), sample only when the operation(s) is being conducted.

(i) Subject to approval by the permitting authority, you may conduct representative sampling of stacks when there are more than three stacks associated with a process.

§ 63.7823 What test methods and other procedures must I use to demonstrate initial compliance with the opacity limits?

(a) You must conduct each performance test that applies to your affected source according to the requirements in §63.7(h)(5) and the conditions detailed in paragraphs (b) through (d) of this section.

(b) You must conduct each visible emissions performance test such that the opacity observations overlap with the performance test for particulate matter.

(d) To determine compliance with the applicable opacity limit in Table 1 to this subpart for BOPF shops:

(1) For an existing BOPF shop:

(i) Using a certified observer, determine the opacity of emissions according to Method 9 in appendix A to part 60 of this chapter except as specified in paragraphs (d)(1)(ii) and (iii) of this section.

(ii) Instead of procedures in section 2.4 of Method 9 in appendix A to part 60 of this chapter, record observations to the nearest 5 percent at 15-second intervals for at least three steel production cycles.

(iii) Instead of procedures in section 2.5 of Method 9 in appendix A to part 60 of this chapter, determine the 3-minute block average opacity from the average of 12 consecutive observations recorded at 15-second intervals.

(4) Opacity observations must cover the entire steel production cycle and must be made for at least three cycles. The steel production cycle begins when the scrap is charged to the furnace and ends 3 minutes after the slag is emptied from the vessel into the slag pot.

(5) Determine and record the starting and stopping times of the steel production cycle.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39586, July 13, 2006]

§ 63.7824 What test methods and other procedures must I use to establish and demonstrate initial compliance with operating limits?

(a) For each capture system subject to an operating limit in §63.7790(b)(1), you must certify that the system operated during the performance test at the site-specific operating limits established in your operation and maintenance plan using the procedures in paragraphs (a)(1) through (4) of this section.

(1) Concurrent with all opacity observations, measure and record values for each of the operating limit parameters in your capture system operation and maintenance plan according to the monitoring requirements specified in §63.7830(a).

(2) For any dampers that are manually set and remain at the same position at all times the capture system is operating, the damper position must be visually checked and recorded at the beginning and end of each opacity observation period segment.

(3) Review and record the monitoring data. Identify and explain any times the capture system operated outside the applicable operating limits.

(4) Certify in your performance test report that during all observation period segments, the capture system was operating at the values or settings established in your capture system operation and maintenance plan.

(b) For a venturi scrubber subject to operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you must establish site-specific operating limits according to the procedures in paragraphs (b)(1) and (2) of this section. You may establish the parametric monitoring limit during the initial performance test or during any other performance test run that meets the emission limit.

(1) Using the CPMS required in §63.7830(c), measure and record the pressure drop and scrubber water flow rate during each run of the particulate matter performance test.

(2) Compute and record the hourly average pressure drop and scrubber water flow rate for each individual test run. Your operating limits are the lowest average pressure drop and scrubber water flow rate value in any of the three runs that meet the applicable emission limit.

(c) You may change the operating limits for a capture system or venturi scrubber if you meet the requirements in paragraphs (c)(1) through (3) of this section.

(1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate compliance with the applicable emission limitation in Table 1 to this subpart.

(3) Establish revised operating limits according to the applicable procedures in paragraphs (a) and (b) of this section for a control device or capture system.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39586, July 13, 2006]

§ 63.7825 How do I demonstrate initial compliance with the emission limitations that apply to me?

(a) For each affected source subject to an emission or opacity limit in Table 1 to this subpart, you have demonstrated initial compliance if:

(1) You meet the conditions in Table 2 to this subpart; and

(2) For each capture system subject to the operating limit in §63.7790(b)(1), you have established appropriate site-specific operating limit(s) and have a record of the operating parameter data measured during the performance test in accordance with §63.7824(a)(1); and

(3) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you have established appropriate site-specific operating limits and have a record of the pressure drop and scrubber water flow rate measured during the performance test in accordance with §63.7824(b).

(c) For each emission limitation that applies to you, you must submit a notification of compliance status according to §63.7840(e).

[68 FR 27663, May 20, 2003, as amended at 71 FR 39586, July 13, 2006]

§ 63.7826 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

(a) For a capture system applied to emissions from a sinter plant discharge end or blast furnace casthouse or to secondary emissions from a BOPF, you have demonstrated initial compliance if you meet all of the conditions in paragraphs (a)(1) through (4) of this section.

(1) Prepared the capture system operation and maintenance plan according to the requirements of §63.7800(b), including monthly inspection procedures and detailed descriptions of the operating parameter(s) selected to monitor the capture system;

(2) Certified in your performance test report that the system operated during the test at the operating limits established in your operation and maintenance plan;

(3) Submitted a notification of compliance status according to the requirements in §63.7840(e), including a copy of the capture system operation and maintenance plan and your certification that you will operate the capture system at the values or settings established for the operating limits in that plan; and

(4) Prepared a site-specific monitoring plan according to the requirements in §63.7831(a).

(b) For each control device subject to operating limits in §63.7790(b)(2) or (3), you have demonstrated initial compliance if you meet all the conditions in paragraphs (b)(1) through (3) of this section.

(1) Prepared the control device operation and maintenance plan according to the requirements of §63.7800(b), including a preventative maintenance schedule and, as applicable, detailed descriptions of the corrective action procedures for baghouses and other control devices;

(2) Submitted a notification of compliance status according to the requirements in §63.7840(e), including a copy of the operation and maintenance plan; and

(3) Prepared a site-specific monitoring plan according to the requirements in §63.7831(a).

[68 FR 27663, May 20, 2003, as amended at 71 FR 39586, July 13, 2006]

Continuous Compliance Requirements

§ 63.7830 What are my monitoring requirements?

(a) For each capture system subject to an operating limit in §63.7790(b)(1) established in your capture system operation and maintenance plan, you must install, operate, and maintain a CPMS according to the requirements in §63.7831(e) and the requirements in paragraphs (a)(1) through (3) of this section.

(1) Dampers that are manually set and remain in the same position are exempt from the requirement to install and operate a CPMS. If dampers are not manually set and remain in the same position, you must make a visual check at least once every 24 hours to verify that each damper for the capture system is in the same position as during the initial performance test.

(2) If you use a flow measurement device to monitor the operating limit parameter for a sinter plant discharge end or blast furnace casthouse, you must monitor the hourly average rate (*e.g.,* the hourly average actual volumetric flow rate through each separately ducted hood, the average hourly total volumetric flow rate at the inlet to the control device) according to the requirements in §63.7832.

(3) If you use a flow measurement device to monitor the operating limit parameter for a capture system applied to secondary emissions from a BOPF, you must monitor the average rate for each steel production cycle (*e.g.,* the average actual volumetric flow rate through each separately ducted hood for each steel production cycle, the average total volumetric flow rate at the inlet to the control device for each steel production cycle) according to the requirements in §63.7832.

(b) Except as provided in paragraph (b)(3) of this section, you must meet the requirements in paragraph (b)(1) or (2) of this section for each baghouse applied to meet any particulate emission limit in Table 1 to this subpart. You must conduct inspections of each baghouse according to the requirements in paragraph (b)(4) of this section.

(1) Install, operate, and maintain a bag leak detection system according to §63.7831(f) and monitor the relative change in particulate matter loadings according to the requirements in §63.7832; or

(2) If you do not install and operate a bag leak detection system, you must install, operate, and maintain a COMS according to the requirements in §63.7831(h) and monitor the hourly average opacity of emissions exiting each control device stack according to the requirements in §63.7832.

(3) A bag leak detection system and COMS are not required for a baghouse that meets the requirements in paragraphs (b)(3)(i) and (ii) of this section.

(i) The baghouse is a positive pressure baghouse and is not equipped with exhaust gas stacks; and

(ii) The baghouse was installed before August 30, 2005.

(4) You must conduct inspections of each baghouse at the specified frequencies according to the requirements in paragraphs (b)(4)(i) through (viii) of this section.

(i) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual.

(ii) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms.

(iii) Check the compressed air supply for pulse-jet baghouses each day.

(iv) Monitor cleaning cycles to ensure proper operation using an appropriate methodology.

(v) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means.

(vi) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or laying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices.

(vii) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks.

(viii) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

(c) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you must install, operate, and maintain CPMS according to the requirements in §63.7831(g) and monitor the hourly average pressure drop and water flow rate according to the requirements in §63.7832.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39586, July 13, 2006]

§ 63.7831 What are the installation, operation, and maintenance requirements for my monitors?

(a) For each CPMS required in §63.7830, you must develop and make available for inspection upon request by the permitting authority a site-specific monitoring plan that addresses the requirements in paragraphs (a)(1) through (8) of this section.

(1) Installation of the CPMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.,* on or downstream of the last control device);

(2) Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system;

(3) Performance evaluation procedures and acceptance criteria (*e.g.,* calibrations);

(4) Ongoing operation and maintenance procedures in accordance with the general requirements of §§63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8);

(5) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d);

(6) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §§63.10(c), (e)(1), and (e)(2)(i);

(7) Corrective action procedures you will follow in the event a venturi scrubber exceeds the operating limit in §63.7790(b)(2); and

(b) Unless otherwise specified, each CPMS must:

(1) Complete a minimum of one cycle of operation for each successive 15-minute period and collect a minimum of three of the required four data points to constitute a valid hour of data;

(2) Provide valid hourly data for at least 95 percent of every averaging period; and

(3) Determine and record the hourly average of all recorded readings.

(c) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(d) You must operate and maintain the CPMS in continuous operation according to the site-specific monitoring plan.

(e) For each capture system subject to an operating limit in §63.7790(b)(1), you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a) through (d) of this section.

(f) For each baghouse equipped with a bag leak detection system according to §63.7830(b)(1), you must install, operate, and maintain the bag leak detection system according to the requirements in paragraphs (f)(1) through (7) of this section.

(1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(2) The system must provide output of relative changes in particulate matter loadings.

(3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over a preset level. The alarm must be located such that it can be heard by the appropriate plant personnel.

(4) Each system that works based on the triboelectric effect must be installed, operated, and maintained in a manner consistent with the guidance document, “Fabric Filter Bag Leak Detection Guidance,” EPA–454/R–98–015, September 1997. You may install, operate, and maintain other types of bag leak detection systems in a manner consistent with the manufacturer's written specifications and recommendations.

(5) To make the initial adjustment of the system, establish the baseline output by adjusting the sensitivity (range) and the averaging period of the device. Then, establish the alarm set points and the alarm delay time.

(6) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in your operation and maintenance plan. Do not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365-day period unless a responsible official certifies, in writing, that the baghouse has been inspected and found to be in good operating condition.

(7) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(g) For each venturi scrubber subject to operating limits in §63.7790(b)(2) for pressure drop and scrubber water flow rate, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a) through (d) of this section.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39587, July 13, 2006]

§ 63.7832 How do I monitor and collect data to demonstrate continuous compliance?

(a) Except for monitoring malfunctions, out-of-control periods as specified in §63.8(c)(7), associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times an affected source is operating.

(b) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels or to fulfill a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance.

(c) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

§ 63.7833 How do I demonstrate continuous compliance with the emission limitations that apply to me?

(a) You must demonstrate continuous compliance for each affected source subject to an emission or opacity limit in §63.7790(a) by meeting the requirements in Table 3 to this subpart.

(b) You must demonstrate continuous compliance for each capture system subject to an operating limit in §63.7790(b)(1) by meeting the requirements in paragraphs (b)(1) and (2) of this section.

(1) Operate the capture system at or above the lowest values or settings established for the operating limits in your operation and maintenance plan; and

(2) Monitor the capture system according to the requirements in §63.7830(a) and collect, reduce, and record the monitoring data for each of the operating limit parameters according to the applicable requirements of this subpart;

(c) For each baghouse applied to meet any particulate emission limit in Table 1 to this subpart, you must demonstrate continuous compliance by meeting the requirements in paragraph (c)(1) or (2) of this section as applicable, and paragraphs (c)(3) and (4) of this section:

(1) For a baghouse equipped with a bag leak detection system, operating and maintaining each bag leak detection system according to §63.7831(f) and recording all information needed to document conformance with these requirements. If you increase or decrease the sensitivity of the bag leak detection system beyond the limits specified in §63.7831(f)(6), you must include a copy of the required written certification by a responsible official in the next semiannual compliance report.

(2) For a baghouse equipped with a COMS, operating and maintaining each COMS and reducing the COMS data according to §63.7831(h).

(3) Inspecting each baghouse according to the requirements in §63.7830(b)(4) and maintaining all records needed to document conformance with these requirements.

(4) Maintaining records of the time you initiated corrective action in the event of a bag leak detection system alarm or when the hourly average opacity exceeded 5 percent, the corrective action(s) taken, and the date on which corrective action was completed.

(d) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.7790(b)(2), you must demonstrate continuous compliance by meeting the requirements of paragraphs (d)(1) through (4) of this section:

(1) Maintaining the hourly average pressure drop and scrubber water flow rate at levels no lower than those established during the initial or subsequent performance test;

(2) Operating and maintaining each venturi scrubber CPMS according to §63.7831(g) and recording all information needed to document conformance with these requirements; and

(3) Collecting and reducing monitoring data for pressure drop and scrubber water flow rate according to §63.7831(b) and recording all information needed to document conformance with these requirements.

(4) If the hourly average pressure drop or scrubber water flow rate is below the operating limits, you must follow the corrective action procedures in paragraph (g) of this section.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39587, July 13, 2006]

§ 63.7834 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?

(a) For each capture system and control device subject to an operating limit in §63.7790(b), you must demonstrate continuous compliance with the operation and maintenance requirements in §63.7800(b) by meeting the requirements of paragraphs (a)(1) through (4) of this section:

(1) Making monthly inspections of capture systems and initiating corrective action according to §63.7800(b)(1) and recording all information needed to document conformance with these requirements;

(2) Performing preventative maintenance according to §63.7800(b)(2) and recording all information needed to document conformance with these requirements;

(3) Initiating and completing corrective action for a baghouse equipped with a bag leak detection system or COMS according to §63.7800(b)(4) and recording all information needed to document conformance with these requirements, including the time you initiated corrective action, the corrective action(s) taken, and date on which corrective action was completed.

(4) Initiating and completing corrective action for a venturi scrubber equipped with a CPMS or an electrostatic precipitator equipped with a COMS according to §63.7833(g) and recording all information needed to document conformance with these requirements, including the time you initiated corrective action, the corrective action(s) taken within the first 24 hours according to §63.7833(g)(1) and whether they were successful, the corrective action(s) taken

within the second 24 hours according to §63.7833(g)(2) and whether they were successful, and the date on which corrective action was completed.

(b) You must maintain a current copy of the operation and maintenance plan required in §63.7800(b) onsite and available for inspection upon request. You must keep the plans for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39588, July 13, 2006]

§ 63.7835 What other requirements must I meet to demonstrate continuous compliance?

(a) *Deviations.* Except as provided in §63.7833(g), you must report each instance in which you did not meet each emission limitation in §63.7790 that applies to you. This includes periods of startup, shutdown, and malfunction. You also must report each instance in which you did not meet each operation and maintenance requirement in §63.7800 that applies to you. These instances are deviations from the emission limitations and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements in §63.7841.

(b) *Startups, shutdowns, and malfunctions.* (1) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.6(e)(1).

(2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

[68 FR 27663, May 20, 2003, as amended at 71 FR 20468, Apr. 20, 2006; 71 FR 39588, July 13, 2006]

Notifications, Reports, and Records

§ 63.7840 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e) and (f)(4), and 63.9(b) through (h) that apply to you by the specified dates.

(b) As specified in §63.9(b)(2), if you startup your affected source before May 20, 2003, you must submit your initial notification no later than September 17, 2003.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in §63.7(b)(1).

(e) If you are required to conduct a performance test, opacity observation, or other initial compliance demonstration, you must submit a notification of compliance status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration that does not include a performance test, you must submit the notification of compliance status before the close of business on the 30th calendar day following completion of the initial compliance demonstration.

(2) For each initial compliance demonstration that does include a performance test, you must submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to §63.10(d)(2).

§ 63.7841 What reports must I submit and when?

(a) *Compliance report due dates.* Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements in paragraphs (a)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7783 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your source in §63.7783.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after your first compliance report is due.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (a)(1) through (4) of this section.

(b) *Compliance report contents.* Each compliance report must include the information in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (8) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there were no deviations from the continuous compliance requirements in §§63.7833 and 63.7834 that apply to you, a statement that there were no deviations from the emission limitations or operation and maintenance requirements during the reporting period.

(6) If there were no periods during which a continuous monitoring system (including a CPMS, COMS, or continuous emission monitoring system (CEMS) was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

(7) For each deviation from an emission limitation in §63.7790 that occurs at an affected source where you are not using a continuous monitoring system (including a CPMS, COMS, or CEMS) to comply with an emission limitation in this subpart, the compliance report must contain the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(7)(i) and (ii) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The total operating time of each affected source during the reporting period.

(ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable and the corrective action taken.

(8) For each deviation from an emission limitation occurring at an affected source where you are using a continuous monitoring system (including a CPMS or COMS) to comply with the emission limitation in this subpart, you must include the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(8)(i) through (xi) of this section. This includes periods of startup, shutdown, and malfunction.

(i) The date and time that each malfunction started and stopped.

(ii) The date and time that each continuous monitoring was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous monitoring system was out-of-control as specified in §63.8(c)(7), including the information in §63.8(c)(8).

(iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(v) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(vi) A breakdown of the total duration of the deviations during the reporting period including those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.

(viii) A brief description of the process units.

(ix) A brief description of the continuous monitoring system.

(x) The date of the latest continuous monitoring system certification or audit.

(xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

(c) *Immediate startup, shutdown, and malfunction report.* If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements in §63.10(d)(5)(ii).

(d) *Part 70 monitoring report.* If you have obtained a title V operating permit for an affected source pursuant to 40 CFR part 70 or 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emission limitation or operation and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements for an affected source to your permitting authority.

§ 63.7842 What records must I keep?

(a) You must keep the following records:

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, performance evaluations, and opacity observations as required in §63.10(b)(2)(viii).

(b) For each COMS, you must keep the records specified in paragraphs (b)(1) through (4) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Monitoring data for a performance evaluation as required in §63.6(h)(7)(i) and (ii).

(3) Previous (that is, superceded) versions of the performance evaluation plan as required in §63.8(d)(3).

(4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(c) You must keep the records required in §63.6(h)(6) for visual observations.

(d) You must keep the records required in §§63.7833 and 63.7834 to show continuous compliance with each emission limitation and operation and maintenance requirement that applies to you.

§ 63.7843 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to §63.10(b)(1). You can keep the records offsite for the remaining 3 years.

Other Requirements and Information

§ 63.7850 What parts of the General Provisions apply to me?

Table 4 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§ 63.7851 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the United States Environmental Protection Agency (U.S. EPA), or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternative opacity emission limits in Table 1 to this subpart under §63.6(h)(9).

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90, except for approval of an alternative method for the oil content of the sinter plant feedstock or volatile organic compound measurements for the sinter plant windbox exhaust stream stack as provided in §63.7824(f).

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39588, July 13, 2006]

§ 63.7852 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in §63.2, and in this section as follows.

Bag leak detection system means a system that is capable of continuously monitoring relative particulate matter (dust) loadings in the exhaust of a baghouse to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on tribroelectric, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

Basic oxygen process furnace means any refractory-lined vessel in which high-purity oxygen is blown under pressure through a bath of molten iron, scrap metal, and fluxes to produce steel. This definition includes both top and bottom blown furnaces, but does not include argon oxygen decarburization furnaces.

Basic oxygen process furnace shop means the place where steelmaking operations that begin with the transfer of molten iron (hot metal) from the torpedo car and end prior to casting the molten steel, including hot metal transfer, desulfurization, slag skimming, refining in a basic oxygen process furnace, and ladle metallurgy occur.

Basic oxygen process furnace shop ancillary operations means the processes where hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy occur.

Blast furnace means a furnace used for the production of molten iron from iron ore and other iron bearing materials.

Bottom-blown furnace means any basic oxygen process furnace in which oxygen and other combustion gases are introduced into the bath of molten iron through tuyeres in the bottom of the vessel or through tuyeres in the bottom and sides of the vessel.

Casthouse means the building or structure that encloses the bottom portion of a blast furnace where the hot metal and slag are tapped from the furnace.

Certified observer means a visible emission observer certified to perform EPA Method 9 opacity observations.

Desulfurization means the process in which reagents such as magnesium, soda ash, and lime are injected into the hot metal, usually with dry air or nitrogen, to remove sulfur.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation (including operating limits) or operation and maintenance requirement;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Discharge end means the place where those operations conducted within the sinter plant starting at the discharge of the sintering machine's traveling grate including (but not limited to) hot sinter crushing, screening, and transfer operations occur.

Emission limitation means any emission limit, opacity limit, or operating limit.

Hot metal transfer station means the location in a basic oxygen process furnace shop where molten iron (hot metal) is transferred from a torpedo car or hot metal car used to transport hot metal from the blast furnace casthouse to a

holding vessel or ladle in the basic oxygen process furnace shop. This location also is known as the reladling station or ladle transfer station.

Integrated iron and steel manufacturing facility means an establishment engaged in the production of steel from iron ore.

Ladle metallurgy means a secondary steelmaking process that is performed typically in a ladle after initial refining in a basic oxygen process furnace to adjust or amend the chemical and/or mechanical properties of steel. This definition does not include vacuum degassing.

Primary emissions means particulate matter emissions from the basic oxygen process furnace generated during the steel production cycle which are captured and treated in the furnace's primary emission control system.

Primary emission control system means the combination of equipment used for the capture and collection of primary emissions (*e.g.,* an open hood capture system used in conjunction with an electrostatic precipitator or a closed hood system used in conjunction with a scrubber).

Primary oxygen blow means the period in the steel production cycle of a basic oxygen process furnace during which oxygen is blown through the molten iron bath by means of a lance inserted from the top of the vessel (top-blown) or through tuyeres in the bottom and/or sides of the vessel (bottom-blown).

Responsible official means responsible official as defined in §63.2.

Secondary emissions means particulate matter emissions that are not controlled by a primary emission control system, including emissions that escape from open and closed hoods, lance hole openings, and gaps or tears in ductwork to the primary emission control system.

Secondary emission control system means the combination of equipment used for the capture and collection of secondary emissions from a basic oxygen process furnace.

Sinter cooler means the apparatus used to cool the hot sinter product that is transferred from the discharge end through contact with large volumes of induced or forced draft air.

Sinter plant means the machine used to produce a fused clinker-like aggregate or sinter of fine iron-bearing materials suited for use in a blast furnace. The machine is composed of a continuous traveling grate that conveys a bed of ore fines and other finely divided iron-bearing material and fuel (typically coke breeze), a burner at the feed end of the grate for ignition, and a series of downdraft windboxes along the length of the strand to support downdraft combustion and heat sufficient to produce a fused sinter product.

Skimming station means the locations inside a basic oxygen process furnace shop where slag is removed from the top of the molten metal bath.

Steel production cycle means the operations conducted within the basic oxygen process furnace shop that are required to produce each batch of steel. The following operations are included: scrap charging, preheating (when done), hot metal charging, primary oxygen blowing, sampling, (vessel turndown and turnup), additional oxygen blowing (when done), tapping, and deslagging. The steel production cycle begins when the scrap is charged to the furnace and ends after the slag is emptied from the vessel into the slag pot.

Top-blown furnace means any basic oxygen process furnace in which oxygen is introduced into the bath of molten iron by means of an oxygen lance inserted from the top of the vessel.

Windboxes means the compartments that provide for a controlled distribution of downdraft combustion air as it is drawn through the sinter bed of a sinter plant to make the fused sinter product.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39588, July 13, 2006]

Table 1 to Subpart FFFFF of Part 63—Emission and Opacity Limits

As required in §63.7790(a), you must comply with each applicable emission and opacity limit in the following table:

For . . .	You must comply with each of the following . . .
9. Each BOPF at a new or existing shop	a. You must not cause to be discharged to the atmosphere any gases that exit from a primary emission control system for a BOPF with a closed hood system at a new or existing BOPF shop that contain, on a flow-weighted basis, particulate matter in excess of 0.03 gr/dscf during the primary oxygen blow[2][3]; and b. You must not cause to be discharged to the atmosphere any gases that exit from a primary emission control system for a BOPF with an open hood system that contain, on a flow-weighted basis, particulate matter in excess of 0.02 gr/dscf during the steel production cycle for an existing BOPF shop[2][3]or 0.01 gr/dscf during the steel production cycle for a new BOPF shop[3]; and c. You must not cause to be discharged to the atmosphere any gases that exit from a control device used solely for the collection of secondary emissions from the BOPF that contain particulate matter in excess of 0.01 gr/dscf for an existing BOPF shop[2]or 0.0052 gr/dscf for a new BOPF shop
10. Each hot metal transfer, skimming, and desulfurization operation at a new or existing BOPF shop	You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain particulate matter in excess of 0.01 gr/dscf for an existing BOPF shop[2]or 0.003 gr/dscf for a new BOPF shop.
11. Each ladle metallurgy operation at a new or existing BOPF shop	You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain particulate matter in excess of 0.01 gr/dscf for an existing BOPF shop[2]or 0.004 gr/dscf for a new BOPF shop.
12. Each roof monitoring at an existing BOPF shop	You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the BOPF shop or any other building housing the BOPF or BOPF shop operation that exhibit opacity greater than 20 percent (3-minute average).

[2]This concentration limit (gr/dscf) for a control device does not apply to discharges inside a building or structure housing the discharge end at an existing sinter plant, inside a casthouse at an existing blast furnace, or inside an existing BOPF shop if the control device was installed before August 30, 2005.
[3]This limit applies to control devices operated in parallel for a single BOPF during the oxygen blow.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39588, July 13, 2006]

Table 2 to Subpart FFFFF of Part 63—Initial Compliance with Emission and Opacity Limits

As required in §63.7825(a)(1), you must demonstrate initial compliance with the emission and opacity limits according to the following table:

For . . .	You have demonstrated initial compliance if . . .
9. Each BOPF at a new or existing BOPF shop	a. The average concentration of particulate matter from a primary emission control system applied to emissions from a BOPF with a closed hood system, measured according to the performance test procedures in §63.7822(f), did not exceed 0.03 gr/dscf for a new or existing BOPF shop; b. The average concentration of particulate matter from a primary emission control system applied to emissions from a BOPF with an open hood system, measured according to the performance test procedures in §63.7822(g), did not exceed 0.02 gr/dscf for an existing BOPF shop or 0.01 gr/dscf for a new BOPF shop; and c. The average concentration of particulate matter from a control device applied solely to secondary emissions from a BOPF, measured according to the performance test procedures in §63.7822(g), did not exceed 0.01 gr/dscf for an existing BOPF shop or 0.0052 gr/dscf for a new BOPF shop.
10. Each hot metal transfer skimming, and desulfurization at a new or existing BOPF shop	The average concentration of particulate matter from a control device applied to emissions from hot metal transfer, skimming, or desulfurization, measured according to the performance test procedures in §63.7822(h), did not exceed 0.01 gr/dscf for an existing BOPF shop or 0.003 gr/dscf for a new BOPF shop.
11. Each ladle metallurgy operation at a new or existing BOPF shop	The average concentration of particulate matter from a control device applied to emissions from a ladle metallurgy operation, measured according to the performance test procedures in §63.7822(h), did not exceed 0.01 gr/dscf for an existing BOPF shop or 0.004 gr/dscf for a new BOPF shop.
12. Each roof monitor at an existing BOPF shop	The opacity of secondary emissions from each BOPF shop, determined according to the performance test procedures in §63.7823(d), did not exceed 20 percent (3-minute average).

[68 FR 27663, May 20, 2003, as amended at 71 FR 39589, July 13, 2006]

Table 3 to Subpart FFFFF of Part 63—Continuous Compliance With Emission and Opacity Limits

As required in §63.7833(a), you must demonstrate continuous compliance with the emission and opacity limits according to the following table:

For . . .	You must demonstrate continuous compliance by . . .
9. Each BOPF at a new or existing BOPF shop	a. Maintaining emissions of particulate matter from the primary control system for a BOPF with a closed hood system at or below 0.03 gr/dscf; and b. Maintaining emissions of particulate matter from the primary control system for a BOPF with an open hood system at or below 0.02 gr/dscf for an existing BOPF shop or 0.01 gr/dscf for a new BOPF shop; and c. Maintaining emissions of particulate matter from a control device applied solely to secondary emissions from a BOPF at or below 0.01 gr/dscf for an existing BOPF shop or 0.0052 gr/dscf for a new BOPF shop; and d. Conducting subsequent performance tests at the frequencies specified in §63.7821.
10. Each hot metal transfer, skimming, and desulfurization operation at a new or existing BOPF shop	a. Maintaining emissions of particulate matter from a control device at or below 0.01 gr/dscf at an existing BOPF or 0.003 gr/dscf for a new BOPF; and b. Conducting subsequent performance tests at the frequencies specified in §63.7821.
11. Each ladle metallurgy operation at a new or existing BOPF shop	a. Maintaining emissions of particulate matter from a control device at or below 0.01 gr/dscf at an existing BOPF shop or 0.004 gr/dscf for a new BOPF shop; and b. Conducting subsequent performance tests at the frequencies specified in §63.7821.
12. Each roof monitor at an existing BOPF shop	a. Maintaining the opacity of secondary emissions that exit any opening in the BOPF shop or other building housing the BOPF shop or shop operation at or below 20 percent (3-minute average); and b. Conducting subsequent performance tests at the frequencies specified in §63.7821.

[71 FR 39590, July 13, 2006]

Table 4 to Subpart FFFFF of Part 63—Applicability of General Provisions to Subpart FFFFF

As required in §63.7850, you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) shown in the following table:

Citation	Subject	Applies to Subpart FFFFF	Explanation
§63.1	Applicability	Yes.	
§63.2	Definitions	Yes.	
§63.3	Units and Abbreviations	Yes.	
§63.4	Prohibited Activities	Yes.	
§63.5	Construction/Reconstruction	Yes.	
§63.6(a), (b), (c), (d), (e), (f), (g), (h)(2)(ii)–(h)(9)	Compliance with Standards and Maintenance Requirements	Yes.	
§63.6(h)(2)(i)	Determining Compliance with Opacity and VE Standards	No	Subpart FFFFF specifies methods and procedures for determining compliance with opacity emission and operating limits.
§63.6(i)	Extension of Compliance with Emission Standards	Yes	
§63.6(j)	Exemption from Compliance with Emission Standards	Yes	
§63.7(a)(1)–(2)	Applicability and Performance Test Dates	No	Subpart FFFFF and specifies performance test applicability and dates.
§63.7(a)(3), (b), (c)–(h)	Performance Testing Requirements	Yes	
§63.8(a)(1)–(3), (b), (c)(1)–(3), (c)(4)(i)–(ii), (c)(5)–(6), (c)(7)–(8), (f)(1)–(5), (g)(1)–(4)	Monitoring Requirements	Yes	CMS requirements in §§63.8(c)(4)(i)–(ii), (c)(5)–(6), (d), and (e) apply only to COMS.
§63.8(a)(4)	Additional Monitoring Requirements for Control Devices in §63.11	No	Subpart FFFFF does not require flares.
§63.8(c)(4)	Continuous Monitoring System Requirements	No	Subpart FFFFF specifies requirements for operation of CMS.
§63.8(f)(6)	RATA Alternative	No	

Citation	Subject	Applies to Subpart FFFFF	Explanation
§63.8(g)(5)	Data Reduction	No	Subpart FFFFF specifies data reduction requirements.
§63.9	Notification Requirements	Yes	Additional notifications for CMS in §63.9(g) apply only to COMS.
§63.10(a), (b)(1), (b)(2)(i)–(xii), (b)(2)(xiv), (b)(3), (c)(1)–(6), (c)(9)–(15), (d), (e)(1)–(2), (e)(4), (f)	Recordkeeping and Reporting Requirements	Yes	Additional records for CMS in §63.10(c)(1)–(6), (9)–(15), and reports in §63.10(d)(1)–(2) apply only to COMS.
§63.10(b)(2) (xiii)	CMS Records for RATA Alternative	No	
§63.10(c)(7)–(8)	Records of Excess Emissions and Parameter Monitoring Exceedances for CMS	No	Subpart FFFFF specifies record requirements.
§63.10(e)(3)	Excess Emission Reports	No	Subpart FFFFF specifies reporting requirements
§63.11	Control Device Requirements	No	Subpart FFFFF does not require flares.
§63.12	State Authority and Delegations	Yes.	
§63.13–§63.15	Addresses, Incorporation by Reference, Availability of Information	Yes.	

[68 FR 27663, May 20, 2003, as amended at 71 FR 39591, July 13, 2006]

SECTION D.10 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: One (1) Hot Rolling Mill

(a) Four (4) reheat furnaces Nos. 1, 2, 3 and 4, identified as RMF10500, RMF20501, RMF30502 and RMF40503 commenced operation in 1967, with heat input capacity of 600 MMBtu per hour each. Each furnace is equipped to combust natural gas and coke oven gas with emissions exhausting through Stacks RM6500, RM6501, RM6502 and RM6503.

(b) Two (2) waste heat boilers Nos. 1 and 2 , identified as RB1B0508 and RB2B0509, commenced operation in 1967, with a heat input capacity of 226 MMBtu per hour each. The heat input capacity from fuel from these boilers is derived from a combination of waste heat ducted from the reheat furnaces and the combustion of natural gas and coke oven gas. Emissions exhaust through the waste heat boiler stacks HB6504 and HB6505.

(c) One (1) 84-inch Hot Strip Mill, identified as RMV00504, commenced operation in 1967, with a maximum capacity of 856 tons per hour, 5 roughing mills and a 7-stand finishing mill with fugitive emissions through a Roof Monitor RM6630.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.10.1 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38]

(a) Pursuant to Significant Source Modification 089-19709-00121, issued May 2, 2005 and 326 IAC 6.8-2-38, PM_{10} emissions from the 84" Hot Strip Mill Reheat Furnaces Nos. 1, 2, 3 and 4 Stacks RM6500, RM6501, RM6502 and RM 6503 shall not exceed 0.017 pound per MMBtu of heat input and a total of 40.80 pounds per hour.

(b) Pursuant to 326 IAC 6.8-2-38, PM_{10} emissions from the 84" Hot Strip Mill Waste Heat Boilers Nos. 1 and 2 shall comply with the following:

(1) The PM_{10} emissions from the 84" Hot Strip Mill Waste Heat Boiler No. 1 Stack HB6504 shall not exceed 0.043 pound per MMBtu of heat input and 10.0 pounds per hour.

(2) The PM_{10} emissions from the 84" Hot Strip Mill Waste Heat Boiler No. 2 Stack HB6505 shall not exceed 0.043 pound per MMBtu of heat input and 10.0 pounds per hour.

(c) Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emissions limitations apply to one (1) stack serving the multiple units specified when the facility description notes stack serving, and to each stack of multiple stacks serving multiple facilities when the facility description notes each stack serving.

D.10.2 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20]

Pursuant to 326 IAC 7-4.1-20, SO_2 emissions from the Reheat Furnace Nos. 1, 2, 3 and 4, RMF10500, RMF20501, RMF30502 and RMF40503 and Waste Heat Boilers Nos. 1 and 2, RB1B0508 and RB2B0509 shall comply with the following:

(a) Pursuant to 326 IAC 7-4.1-20(a)(1)(E) and (F), during periods when the coke oven gas desulfurization unit is not operating:

Emission Unit Operating Scenarios		Emission Limit lbs/MMBtu	Emission Limit lbs/hr
During periods when Reheat Furnace Nos. 1, 2, 3 and 4 are not combusting coke oven gas	Waste Heat Boiler Nos. 1 or 2	1.270	287.0
	Remaining Waste Heat Boiler	0.704	159.0
Reheat Furnace Nos. 1, 2, 3 and 4 during periods when combusting coke oven gas.	When four (4) furnaces are operating	0.256	615.0
	When three (3) furnaces are operating	0.342	615.0
	When two (2) furnaces are operating	0.513	615.0
	When one (1) furnace is operating	1.025	615.0

(b) Pursuant to 326 IAC 7-4.1-20(b)(6)(A) and (B), during periods when the coke oven gas desulfurization unit is operating:

Emission Unit Operating Scenarios		Emission Limit lbs/MMBtu	Emission Limit lbs/hr
Waste Heat Boiler Nos. 1 and 2	NA	0.260	58.8 each
Continuous Reheat Furnace Nos. 1, 2, 3 and 4	When four (4) furnaces are operating	0.182	436.5
	When three (3) furnaces are operating	0.243	436.5
	When two (2) furnaces are operating	0.354	436.5
	When one (1) furnace is operating	0.728	436.5

D.10.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and any associated control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.10.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Not later than thirty (30) months after issuance of this permit (Permit No. T089-7663-00121), or an alternative date as determined by OAQ, Compliance Data Section, in order to comply with condition D.1.1, the Permittee shall perform PM_{10} testing on one of the Nos. 1, 2, 3 and 4 Continuous Reheat Furnace stacks RM6500, RM6501, RM6502 or RM6503, using methods as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance

demonstration with no stack being tested in successive tests. Testing shall be performed in accordance with provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation wtih regard to the performance testing required by this condition.

D.10.5 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2]

Pursuant to 326 IAC 7-4.1-2, and in order to comply with conditions D.10.2, the Permittee shall perform Sulfur Fuel Sampling and Analysis. Section C - Sulfur Fuel Sampling and Analysis contains the Permittee's obligation with regard to the sampling and analysis required by this condition.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.10.6 Record Keeping Requirements

(a) To document the compliance status with Condition D.10.2, the Permittee shall maintain records in accordance with Section C - Sulfur Dioxide (SO_2) Record Keeping Requirements (Entire Source).

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.10.7 Reporting Requirements

A quarterly summary report to document the compliance status with condition D.10.2 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C – Sulfur Dioxide SO_2 Reporting Requirements (Entire Source) contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.11 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Two Continuous Pickle Lines

(a) One (1) 84-inch Pickle Line, the North Continuous Pickle Line, identified as HWPO0625, constructed in 1968, with a maximum capacity of 314 tons per hour consisting of four (4) pickle tanks and two (2) rinse tanks (hot and cold). Emissions at this pickle line are controlled by a fume exhaust scrubber, HW3545 exhausting to stack HW6525.

(b) One (1) 80-inch Pickle Line, the South Continuous Pickle Line, identified as HMPO0589, constructed in 1948, with a maximum capacity of 91 tons per hour, consisting of three (3) pickle tanks and two (2) rinse tanks (hot and cold). Emissions are controlled by a fume exhaust scrubber, HM3540, exhausting to stack HM6520.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.11.1 General Provisions Relating to Hazardous Air Pollutants (HAPs) [326 IAC 20-1-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated as 326 IAC 20-1, apply to the emission units described in this section except when otherwise specified in 40 CFR Part 63, Subpart CCC.

D.11.2 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Steel Pickling - HCl Process Facilities and Hydrochloric Acid Regeneration Plants [40 CFR Part 63, Subpart CCC][40 CFR 63.1157]

Pursuant to 40 CFR Part 63, Subpart CCC, the 80-inch and 84-inch Hydrochloric Acid Pickling lines shall comply with the following requirements:

The Permittee shall not cause or allow to be discharged into the atmosphere from the affected pickling lines:

(a) Any gases that contain HCl in a concentration in excess of 18 ppmv; or

(b) HCL at a mass emission rate that corresponds to a collection efficiency of less than 97 percent.

D.11.3 National Emission Standard for Hazardous Air Pollutants (NESHAP) Maintenance Requirements [40 CFR 63.1160]

The Permittee shall comply with the operation and maintenance requirements of 40 CFR Part 63.6(e) (Subpart A, General Provisions) at the 80-inch and 84-inch Hydrochloric Acid Pickling lines. Additionally, the Permittee shall prepare an operation and maintenance plan for each emission control device to be implemented no later than the compliance date. The plan shall be incorporated by reference into the source's Part 70 Permit. All such plans must be consistent with good maintenance practices and, for a scrubber emission control device, must at a minimum:

(a) Require monitoring and recording the pressure drop across the scrubber once per shift while the scrubber is operating in order to identify changes that may indicate a need for maintenance;

(b) Require the manufacturer's recommended maintenance at the recommended intervals on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in

addition to exhaust system and scrubber fans and motors associated with those pumps and fans;

(c) Require cleaning of the scrubber internals and mist eliminators at intervals sufficient to prevent buildup of solids or other fouling;

(d) Require an inspection of each scrubber at intervals of no less than 3 months with;

(1) Cleaning or replacement of any plugged spray nozzles or other liquid delivery devices;

(2) Repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components;

(3) Repair or replacement of droplet eliminator elements as needed;

(4) Repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber; and

(5) Adjustment of damper settings for consistency with the required air flow.

(e) If the scrubber is not equipped with a view port or access hatch allowing visual inspection, alternate means of inspection approved by the Administrator may be used.

(f) The Permittee shall initiate procedures for corrective action within 1 working day of detection of an operating problem and complete all corrective actions as soon as practicable. Procedures to be initiated are the applicable actions that are specified in the maintenance plan. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirement.

(g) The Permittee shall maintain a record of each inspection, including each item identified in (d) above, that is signed by the responsible maintenance official and that shows the date of each inspection, the problem identified, a description of the repair, replacement, or other corrective action taken, and the date of the repair, replacement, or other corrective action taken.

D.11.4 National Emission Standards for Hazardous Air Pollutants (NESHAP) Operational and Equipment Standards [40 CFR 63.1159, Subpart CCC] Hydrochloric acid storage vessels.

Pursuant to 40 CFR 63.1159, Subpart CCC, the Permittee of an affected vessel shall provide and operate, except during loading and unloading of acid, a closed-vent system for each vessel. Loading and unloading shall be conducted either through enclosed lines or each point where the acid is exposed to the atmosphere shall be equipped with a local fume capture system, ventilated through an air pollution control device.

D.11.5 Particulate (PM) Limitation [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), the pickle lines shall not discharge to the atmosphere any gases which contain particulate in excess of 0.03 grains per dry standard cubic feet.

Compliance Determination Requirements

D.11.6 Testing Requirements [40 CFR 63.1161, Subpart CCC]

(a) The Permittee shall conduct a performance test for each process or emission control device to determine and demonstrate compliance with the applicable emission limitation according to the requirements of 40 CFR 63.7 (Subpart A, General Provisions). These tests shall meet the following minimum requirements:

(1) Following approval of the site-specific test plan, the Permittee shall conduct a performance test for each process or control device to either measure simultaneously the mass flows of HCl at the inlet and the outlet of the control device (to determine compliance with the applicable collection efficiency standard) or measure the concentration of HCL in gases exiting the process or the emission control device (to determine compliance with the applicable emission concentration standards).

(2) Compliance with the applicable concentration standard or collection efficiency standard shall be determined by the average of three consecutive runs or by the average of any three of four consecutive runs. Each run shall be conducted under conditions representative of normal process operations.

(3) Compliance is achieved if either the average collection efficiency as determined by the HCL mass flows at the control device inlet and outlet is greater than or equal to the applicable collection efficiency standard, or the average measured concentration of HCL exiting the process or the emission control device is less than or equal to the applicable emission concentration standard.

(b) During the performance test for each emission control device, the Permittee using a wet scrubber to achieve compliance shall establish site-specific operating parameter values for the minimum scrubber makeup water flow rate and, for scrubbers that operate with recirculation the minimum recirculation water flow rate. During the emission test, each operating parameter must be monitored continuously and recorded with sufficient frequency to establish a representative average value for that parameter, but no less frequently than once every 15 minutes. The Permittee shall determine the operating parameter monitoring values as in the averages of the values recorded during any of the runs for which results are used to establish the emission concentration or collection efficiency per 40 CFR 63.1161 (a)(2). A Permittee may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, a Permittee may reestablish compliant operating parameter values as part of any performance test that is conducted subsequent to the initial test or tests.

(c) Conduct performance tests to measure the HCl flows at the control device inlet and outlet or the concentration of HCl exiting the control device according to the procedures described in 40 CFR 63.1161. Performance tests shall be conducted according to an alternative schedule approved by IDEM, OAQ every two and one half (2 ½) years or twice per Part 70 Operating Permit term. If any performance test shows that the HCl emission limitation is being exceeded, the Permittee is in violation of the emission limit.

(d) Pursuant to 40 CFR 63.1163(d), the Permittee of an affected source shall notify IDEM, OAQ in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, to allow IDEM, OAQ to review and approve the site-specific test plan required under 40 CFR 63.7(c), and, if requested by IDEM, OAQ, to have an observer present during the test.

(e) The following test methods from Appendix A of 40 CFR 60 shall be used to determine compliance under 40 CFR 63.1157(a);

(1) Method 1, to determine the number and location of sampling points, with the exception that no sampling traverse point shall be within one inch of the stack or duct wall;

(2) Method 2, to determine gas velocity and volumetric flow rate;

(3) Method 3, to determine the molecular weight of the stack gas;

(4) Method 4, to determine the moisture content of the stack gas; and

(5) Method 26A, "Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources – Isokinetic Method," to determine the HCl mass flows at the inlet and outlet of a control device or the concentration of HCl discharged to the atmosphere. If compliance with a collection efficiency standard is being demonstrated, inlet and outlet measurements shall be performed simultaneously. The minimum sampling time for each run shall be 60 minutes and the minimum sample volume 0.85 dry standard cubic meters (dscm) [30 dry standard cubic feet (dscf)]. The concentration of HCl shall be calculated for each run as follows: C HCL(ppmv) = 0.659 C HCL(mg/dscm), where C (ppmv) is concentration in ppmv and C (mg/dscm) is concentration in milligrams per dry standard cubic meter as calculated by the procedure given in Method 26A.

(6) The Permittee may use equivalent alternative measurement methods approved by U.S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

D.11.7 National Emission Standards for Hazardous Air Pollutants (NESHAP) Monitoring Requirements [40 CFR 63.1162, Subpart CCC]

The Permittee shall:

(a) In addition to conducting performance tests, if a wet scrubber is used as the emission control device, install, operate and maintain systems for the measurement and recording of the scrubber makeup water flow rate and, if required, recirculation water flow rate. These flow rates must be monitored continuously and recorded at least once per shift while the scrubber is operating. Operation of the wet scrubber with excursions of scrubber makeup water flow rate and recirculation water flow rate less than the minimum values established during the performance test or tests will require initiation of corrective action as specified by the maintenance requirements in 40 CFR Part 63.1160(b)(2).

(b) Failure to record each of the operating parameters in 40 CFR Part 63.1162(a)(2) is a violation of the monitoring requirements of 40 CFR Part 63, Subpart CCC.

(c) Each monitoring device shall be certified by the manufacturer to be accurate to within 5 percent and shall be calibrated in accordance with the manufacturer's instructions but not less frequently than once per year.

(d) The Permittee may develop and implement alternative monitoring requirements subject to approval by U.S. EPA.

D.11.8 Monitoring Requirements [40 CFR 63.1162]

Pursuant to 40 CFR 63.1162, the Permittee of an affected hydrochloric acid storage vessel shall inspect each vessel semiannually to determine that the closed vent system and either the air pollution control device or the enclosed loading and unloading line, whichever is applicable, are installed and operating when required.

Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.11.9 Record Keeping Requirements [40 CFR Part 63.1165]

(a) To document the compliance status with Conditions D.11.2 and D.11.3, the Permittee shall maintain the following records pursuant to 40 CFR 63.1165:

(1) The Permittee as required by 40 CFR 63.10(b)(2) (Subpart A, General Provisions), shall maintain general records for 5 years from the date of each record of:

(A) The occurrence and duration of each startup, shutdown, or malfunction of operation;

(B) The occurrence and duration of each malfunction of the air pollution control equipment;

(C) All maintenance performed on the air pollution control equipment;

(D) Actions taken during periods of startup, shutdown, and malfunction and the dates of such actions when these actions are different from the procedures specified in the startup, shutdown, and malfunction plan;

(E) All information necessary to demonstrate conformance with the startup shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction are consistent with the procedures specified in such plan. This information can be recorded in a checklist or similar form. (See 40 CFR 63.10(b)(2)(v))

(F) All required measurements needed to demonstrate compliance with the standard and to support data that the source is required to report, including but not limited to, performance test measurements (including initial and any subsequent performance tests) and measurements as may be necessary to determine the conditions of the initial test or subsequent tests.

(G) All results of initial or subsequent performance tests;

(H) If the Permittee has been granted a waiver from record keeping or reporting requirements under 40 CFR Part 63.10(f), any information demonstrating whether a source is meeting the requirements for a waiver of record keeping or reporting requirements;

(I) If the Permittee has been granted a waiver from the initial performance test under 40 CFR Part 63.7(h), a copy of the full request and approval or disapproval;

(J) All documentation supporting initial notifications and notifications of compliance status required by 40 CFR Part 63.9; and

(K) Records of any applicability determination, including supporting analyses.

(2) In addition to the general records required by 40 CFR 63.1165(a), the Permittee shall maintain records for 5 years from the date of each record of:

(A) Scrubber makeup water flow rate and recirculation water flow rate if a wet scrubber is used;

(B) Calibration and manufacturer certification that monitoring devices are accurate to within 5 percent;

(C) Each maintenance inspection and repair, replacement, or other corrective action; and

(3) The Permittee shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by IDEM, OAQ for the life of the affected source or until the source is no longer subject to these provisions 40 CFR Part 63 Subpart CCC. In addition, if the operation and maintenance plan is revised, the Permittee shall keep previous (i.e., superseded) versions of the plan on record to be made available for inspection by IDEM, OAQ for a period of 5 years after each revision to the plan.

(b) General records and 40 CFR Part 63, Subpart CCC records, for the most recent 2 years of operation must be maintained on site. Records for the 3 previous years may be maintained off site.

(c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.11.10 Reporting Requirements [40 CFR 63.1164]

(a) Pursuant to 40 CFR 63.10(d)(2), the Permittee of an affected source shall report the results of any performance test as part of the notification of compliance status required in 40 CFR 63.1163.

(b) The Permittee of an affected source who is required to submit progress reports under 40 CFR 63.6(i), shall submit such reports to IDEM, OAQ by the dates specified in the written extension of compliance.

(c) Pursuant to 40 CFR 63.6(e) the Permittee of an affected source is required to operate and maintain each affected emission source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the level required by the standard at all time, including during any period of startup, shutdown, or malfunction. Malfunctions must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan.

(1) Pursuant to 40 CFR 63.6(e)(3), the Permittee shall develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, or malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the relevant standard.

(2) Pursuant to 40 CFR 63.10(d)(5)(I) if actions taken by a Permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction plan, the Permittee shall state such information in a semiannual report. The report, to be certified by the Permittee or other responsible official, shall be submitted semiannually and delivered or postmarked by the 30th day following the end of each calendar half; and

(3) Any time an action taken by a Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the Permittee shall comply with all requirements of 40 CFR 63.10(d)(5)(ii).

(d) Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition.

(e) The reports submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.12 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: The Sheet Products Division

(a) North Sheet Mill

(1) One (1) 5-Stand Cold Reduction Mill, identified as H5M50637, constructed in 1964, with a maximum capacity of 400 tons per hour, consisting of 5 Mill Stands. Emissions are controlled by fume collection H53547, exhausting to Stack H56527.

(2) Twenty-six (26) 4-Stack Box Annealing Furnaces and 50 bases, identified as HTAF0813 through HTAF0838, constructed in 1964, with a heat input capacity of 12 MMBtu per hour each. These furnaces are direct fired with emissions exhausting through vent pipes HT6530 through HT6555.

(3) One (1) 80-inch temper mill, constructed in 1964, with a maximum capacity of 250 tons per hour, with fugitive emissions.

(4) One (1) 80-inch Recoil Line, constructed in 1964, with a maximum capacity 120 tons per hour, with fugitive emissions.

(b) South Sheet Mill

(1) Seventeen (17) 8-Stack A Box Annealing furnaces and 66 bases, identified as HXBA0560 through HXBA0576, constructed in 1948. Eleven (11) furnaces have a heat input capacity of 15 MMBtu per hour each and the remaining six (6) are rated at 18 MMBtu per hour each. Emissions from these furnaces exhaust through the Roof Monitor HX6003.

(2) One (1) 2-Stand Temper Mill, identified as H2M00579, constructed in 1974, with a maximum capacity of 89 tons per hour, with fugitive emissions through Roof Monitor H26004.

(3) One (1) No. 6 East Galvanizing Line, constructed in 1962, with a maximum capacity of 48 tons an hour, with one (1) annealing furnace identified as H6F10527 with a heat input of 45 MMBtu per hour and emissions through stack H66516. Also, contains one (1) Galvanneal Furnace identified as HF20529 with a heat input capacity of 20.0 MMBtu per hour and emissions exhausting through Roof Monitor H66006.

(4) Two (2) hydrogen atmosphere batch annealing furnaces, with a total heat input capacity of 10.26 MMBtu per hour, constructed in 1997, consisting of three (3) fixed bases and two (2) movable cooling hoods.

(5) One (1) 84-inch Hot Roll Temper Mill, constructed in 1967, with a maximum capacity of 124 tons per hour, with fugitive emissions.

(6) One (1) coil prep line, constructed in 1968, with a maximum capacity of 73 tons per hour, with fugitive emissions.

(c) Electro-galvanizing Line (EGL)

(1) One (1) Electro-galvanizing Line (EGL), with one HCl pickle tank, No. 1 Pickle tank, identified as HET20685, a cleaner section, a plating section and associated scrubber, with a maximum capacity of 60.5 tons per hour. Fumes from the Pickle Section are controlled by a fume scrubber HE3583 exhausting through stack HE6563. The single sided process for this coating line was constructed in 1977 and was modified in 1993 to a double sided process for coating.

(2) One (1) natural gas fired Boiler No. 1 in the EGL Boiler House, identified as HBB10675, constructed in 1978 and modified in 2001, with a heat input capacity of 39.147 MMBtu per hour, exhausting through stack HB6559.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.12.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the No. 1 Boiler in the EGL Boiler House except when otherwise specified in 40 CFR Part 60, Subpart Dc.

D.12.2 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38]

Pursuant to 326 IAC 6.8-2-38, the PM_{10} emissions from the EGL Boiler House shall not exceed 0.0033 pounds per MMBtu of heat input and a total of 0.13 pound per hour.

D.12.3 Particulate Emissions Limitations [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), the particulate emissions from the North Sheet Mill: 5-Stand Cold Reduction Mill Stack H56527 and the South Sheet Mill: No. 6 East Galvanize Line Stack H66516 shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

D.12.4 Nitrogen Dioxide (NO_X) Emissions Offset Limitations [326 IAC 2-3]

Pursuant to CP 089-8606-00121, issued October 20, 1997, the natural gas usage in the two (2) hydrogen atmosphere batch annealing furnaces shall not exceed 37.2 million cubic feet (MMCF) per 12 consecutive month period with compliance demonstrated at the end of each month. This production limitation is equivalent to NO_X emissions of 2.64 tons per 12 consecutive month period with compliance demonstrated at the end of each month. Therefore, the Emission Offset rule, 326 IAC 2-3, does not apply.

D.12.5 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20(c)(3)]

Pursuant to 326 IAC 7-4.1-20(c)(3) gaseous fuel sources shall burn natural gas only:

(a) if it is not listed in 326 IAC 7-4.1-20; or

(b) under an operating condition not specifically listed in 326 IAC 7-4.1-20.

D.12.6 Preventative Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan of this permit is required for EGL Boiler House Boiler No. 1. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.12.7 Record Keeping Requirements

(a) Pursuant to Minor Source Modification 089-14424-00121, issued August 2, 2001 (modified by MSM 089-15694-00121, issued August 21, 2002), and 40 CFR 60.40c the Permittee shall record and maintain monthly records of the amounts of fuel combusted for the one (1) 39.147 million British thermal units per hour (MMBtu/hr) natural gas fired boiler, identified as EGL-1 boiler.

(b) Pursuant to Minor Source Modification 089-8606-00121, issued October 20, 1997 and to document the compliance status with Condition D.12.4 the Permittee shall maintain monthly records of the natural gas usage in the two (2) hydrogen atmosphere batch annealing furnaces.

(c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.12.8 Reporting Requirements

(a) Pursuant to Minor Source Modification 089-8606-00121, issued October 20, 1997 and to document the compliance status with Condition D.12.4 the Permittee shall submit not later than thirty (30) days after the end of the quarter being reported, the hydrogen atmosphere batch annealing furnaces monthly natural gas usage.

(b) Section C - General Reporting Requirements contains the Permittee’s obligation with regard to the reporting required by this condition.

(c) The reports submitted by the Permittee do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.13 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: The Tin Division is comprised of the following:

(a) One (1) 6-Stand Cold Reduction Mill, identified as TRM00709, constructed in 1967, with a maximum capacity of 150 tons per hour. Emissions are controlled by a mist eliminator TR3600, exhausting to stack TR6575.

(b) One (1) cleaning line, identified as No. 7 Cleaning Line, constructed in 1967, with a maximum capacity of 80 tons per hour. Fumes are controlled by a fume scrubber exhausting to a stack.

(c) Two (2) Annealing Lines, No. 1 and No. 2, each containing an annealing furnace, identified as T1AF0794 and T2AF0799, No. 1 constructed in 1950 and No. 2 constructed in 1959, with a maximum heat input capacities of 32 and 35 MMBtu per hour, respectively. Emissions exhaust to stacks T16609 and T26610. The No. 2 Continuous Anneal Line has a cleaning section with fumes collected in a fume scrubber exhausting through a stack.

(d) Five (5) 4-Stack A Box Annealing Furnaces and 12 bases, identified as TXAF0765 through TXAF0769, constructed in 1968. All furnaces have a heat input of 10.5 MMBtu per hour each. Emissions exhaust to stacks TX6580 through TX6584.

(e) One (1) 48-inch Temper Mill, constructed in 1958, with a maximum capacity of 150 tons per hour, with fugitive emissions. This unit has a dust filter that exhausts inside the building.

(f) One (1) Double Reduction Mill with two (2) mill stands, identified as TDMO0742, constructed in 1963, with a maximum capacity of 75 tons per hour. Emissions are controlled by a mist eliminator D3603, exhausting to stack TD6595.

(g) One (1) No. 1 Tin Free Steel Line (TFS), constructed in 1950, with a maximum capacity of 24 tons per hour. The chemical treatment rinse section, TFR00753 exhaust through stack TF6597 and all other fugitive emissions from the line to roof monitor TF6661.

(h) One (1) No. 5 Electrolytic Tinning Line 5 (ETL), constructed in 1957, and with a maximum capacity of 50 tons per hour. The No. 5 ETL contains a Plating and Chemical Treatment Tank, identified as TFR00777, with fugitive emissions through Roof Monitor T56071.

(i) One (1) No. 6 Electrolytic Tinning Line (6 ETL), constructed in 1966, with a maximum capacity of 120 tons per hour. The 6 ETL also contains a Plating and Chemical Treatment Tank, identified as T6H00786, with fugitive emissions through Roof Monitor T56071.

(j) One (1) Tin Anode Caster, constructed in 1965, with a maximum capacity of 0.57 tons per hour, with fugitive emissions through roof monitor.

(k) One (1) Tin Mill Recoil and inspection Line, constructed in 1967, with a maximum capacity of 14.8 tons per hour.

(l) One (1) 45” Side Trimmer, constructed in 1961, with fugitive emissions through the roof monitor.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.13.1 Particulate Emissions Limitations [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), the particulate emissions shall not exceed three-hundredths (0.03) grain per dry standard cubic feet (gr/dscf) from the following:

(a) 6-Stand Cold Reduction Mill Stack TR6575,

(b) One (1) Double Reduction Mill Stack TD6595, and

(c) No. 1 Tin Free Steel Line Chemical Treatment Rinse Stack TF6597.

D.13.2 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20(c)(3)]

Pursuant to 326 IAC 7-4.1-20(c)(3) gaseous fuel sources shall burn natural gas only:

(a) if it is not listed in 326 IAC 7-4.1-20; or

(b) under an operating condition not specifically listed in 326 IAC 7-4.1-20.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.13.3 Record Keeping Requirements

(a) In order to document the compliance status with conditions D.13.1 and D.13.2, the Permittee shall maintain records of the natural gas usage of the furnaces.

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.14 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: One (1) Boiler House No. 4, comprised of the following:

(a) Two (2) Boilers, No. 1 and No. 2, identified as O4B10459 and O4B20460, constructed in 1967, equipped to combust natural gas, blast furnace gas and fuel oil, with a maximum heat input of 500 MMBtu per hour each, exhausting through Stacks O46268 and O46269, respectively.

(b) One (1) Boiler, No. 3, identified as O4B30461, constructed in 1967, equipped to combust blast furnace gas and natural gas, with a maximum heat input of 500 MMBtu per hour, exhausting through Stack O46270.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.14.1 Lake County PM_{10} Emission Requirements [326 IAC 6.8-2-38]

Pursuant to 326 IAC 6.8-2-38, the PM_{10} emissions from the No. 4 Boiler House Boilers Nos. 1, 2 and 3 Stacks O46268, O46269 and O46270 shall comply with the following:

(a) The PM_{10} emissions from the Number 4 Boiler House Boilers, when one or two boilers are operating shall not exceed 0.054 pounds per MMBtu of heat input and a total of 54.1 pounds per hour.

(b) The PM_{10} emissions from the Number 4 Boiler House Boilers, when three boilers are operating shall not exceed 0.036 pounds per MMBtu of heat input and a total of 54.1 pounds per hour.

(c) Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emissions limitations apply to one (1) stack serving the multiple units specified when the facility description notes stack serving, and to each stack of multiple stacks serving multiple facilities when the facility description notes each stack serving.

D.14.2 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20]

Pursuant to 326 IAC 7-4.1-20, the SO_2 emissions from the No. 4 Boiler House Boilers Nos. 1, 2 and 3 Stacks O46268, O46269 and O46270 shall not exceed the following limitations:

(a) Pursuant to 326 IAC 7-4.1-20(a)(1)(B), during periods when the coke oven gas desulfurization unit is not operating:

Emission Unit Operating Scenarios		Emission Limit lbs/MMBtu	Emission Limit lbs/hr
During periods when No. 14 Blast Furnace Stoves are combusting blast furnace gas	When three (3) boilers are operating:	0.115	172.5 total
	When two (2) boilers are operating:	0.173	172.5 total
	When one (1) boiler is operating:	0.345	172.5 total

Emission Unit Operating Scenarios		Emission Limit lbs/MMBtu	Emission Limit lbs/hr
During periods when No. 14 Blast Furnace Stoves are not combusting blast furnace gas and the Hot Strip Mill Waste Heat Boilers Nos. 1 and 2 are combusting coke oven gas :	When three (3) boilers are operating:	0.200	300.0 total
	When two (2) boilers are operating:	0.300	300.0 total
	When one (1) boiler is operating:	0.600	300.0 total
During periods when No. 14 Blast Furnace Stoves are not combusting blast furnace gas and the Hot Strip Mill Waste Heat Boilers Nos. 1 and 2 are not combusting coke oven gas :	When three (3) boilers are operating:	0.195	293.0 total
	When two (2) boilers are operating:	0.293	293.0 total
	When one (1) boiler is operating:	0.586	293.0 total

(b) Pursuant to 326 IAC 7-4.1-20(b)(2), during periods when the coke oven gas desulfurization unit is operating:

Emission Limit lbs/hr	Emission Limit lbs/MMBtu	Emission Limit lbs/hr
When three (3) boilers are operating:	0.353	529.0 total
When two (2) boilers are operating:	0.529	529.0 total
When one (1) boiler is operating:	1.058 total	529.0 total

D.14.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.14.4 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2]

Pursuant to 326 IAC 7-4.1-2, and in order to comply with conditions D.14.1, the Permittee shall perform Sulfur Fuel Sampling and Analysis. Section C - Sulfur Fuel Sampling and Analysis contains the Permittee's obligation with regard to the sampling and analysis required by this condition.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.14.5 Visible Emission Notations

When Boilers No. 1 and/or No. 2 combust fuel oil or any combination of fuel oil and natural gas or blast furnace gas:

(a) Visible emission notations of the Boilers No. 1 stack O46268 and/or No. 2 stack O46269 shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation of this permit.

Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.14.6 Record Keeping Requirements

(a) To document the compliance status with Condition D.14.2, the Permittee shall maintain records in accordance with Section C - Sulfur Dioxide (SO_2) Record Keeping Requirements (Entire Source).

(b) To document the compliance status with Conditions D.14.5, the Permittee shall maintain records of the once per day visible emission notations when Boilers No. 1 and/or No. 2 combust fuel oil or any combination of fuel oil and natural gas or blast furnace gas.

(c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.14.7 Reporting Requirements

A quarterly summary report to document the compliance status with conditions D.14.2 shall be submitted in accordance with Section C – Sulfur Dioxide Reporting Requirements (Entire Source) of this permit. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. This report does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

D.14.8 Natural Gas Fired Boiler Certification

A semi-annual certification shall be submitted for the Number 4 Boiler House Boilers Nos. 1, 2 and 3, five hundred (500) million British Thermal unit per hour (MMBtu/hr) natural gas fired boilers. Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition. This report does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.15 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: One (1) TurboBlower Boiler House (TBBH), comprised of the following:

(a) Three (3) Boilers, No. 1, No. 2 and No. 3, identified as OTB10462, OTB20463 and OTB30464, constructed in 1948, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a maximum heat input of 410 MMBtu per hour each, exhausting through Stacks OT6271, OT6272 and OT6273, respectively.

(b) One (1) Boiler, No. 4A, identified as OTB40465, constructed in 1990, with a maximum heat input of 244 MMBtu per hour when combusting natural gas. Emissions exhaust through Stack OT6274, with NO_X emissions monitored by a Predictive Emissions Monitoring System (PEMS).

(c) One (1) Boiler No. 5, identified as OTB50466, constructed in 1958, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a maximum heat input of 410 MMBtu per hour, exhausting through Stack OT6275.

(d) One (1) boiler, No. 6, identified as OTB60467, constructed after August 17, 1971, equipped to combust blast furnace gas and natural gas, with a maximum heat input capacity of 710 MMBtu per hour, exhausting through Stack OT6276.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.15.1 General Provisions Relating to New Source Performance Standards (NSPS) [326 IAC 12-1][40 CFR 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, applies to the No. 6 Boiler except when otherwise specified in 40 CFR Part 60, Subpart D and applies to No. 4A boiler, except when otherwise specified in 40 CFR 60, Subpart Db.

D.15.2 New Source Performance Standards (NSPS) Particulate Limitations [326 IAC 12] [40 CFR 60, Subpart D]

Pursuant to Minor Source Modification 089-10160-00121, issued January 13, 2000, 326 IAC 12 and 40 CFR 60.40 through 60.49, Subpart D (Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971), Particulate matter (PM) emissions from TBBH Boiler No. 6 shall not exceed the following:

(a) One-tenth (0.10) lb/MMBtu derived from fossil fuel combustion; and

(b) Twenty percent (20%) opacity except for one six-minute period per hour of not more than 27% opacity.

D.15.3 Lake County PM_{10} Emissions Requirements [326 IAC 6.8-2-38]

Pursuant to 326 IAC 6.8-2-38, the PM_{10} emissions from the TBBH Boilers Nos. 1, 2, 3, 4A, 5 and 6 Stacks OT6271, OT6272, OT6273, OT6274, OT6275 and OT6276 shall comply with the following:

(a) The PM_{10} emissions from the TBBH Boilers Nos. 1, 2, 3 and 5: OT6271, OT6272, OT6273 and OT6275, when four boilers are operating, shall not exceed 0.037 pound per MMBtu of heat input each and a total of 61.0 pounds per hour.

(b) The PM_{10} emissions from the TBBH Boilers Nos. 1, 2, 3 and 5: OT6271, OT6272, OT6273 and OT6275, when three boilers are operating, shall not exceed 0.050 pound per MMBtu of heat input each and a total of 61.0 pounds per hour.

(c) The PM_{10} emissions from the TBBH Boilers Nos. 1, 2, 3 and 5: OT6271, OT6272, OT6273 and OT6275, when one or two boilers are operating, shall not exceed 0.074 pound per MMBtu of heat input each and a total of 61.0 pounds per hour.

(d) The PM_{10} emissions from the TBBH Boiler No. 4A stack OT6274 shall not exceed 0.012 pound per MMBtu of heat input each and 2.9 pounds per hour.

(e) The PM_{10} emissions from the TBBH Boiler No. 6 Stack OT6276, shall not exceed 0.039 pound per MMBtu of heat input and 27.80 pounds per hour.

(f) Each emission limit applies to one (1) stack serving one (1) facility unless otherwise noted. The emissions limitations apply to one (1) stack serving the multiple units specified when the facility description notes stack serving, and to each stack of multiple stacks serving multiple facilities when the facility description notes each stack serving.

D.15.4 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-4.1-20]

Pursuant to 326 IAC 7-4.1-20, the SO_2 emissions from each of the TBBH Boilers Nos. 1, 2, 3, 4A, 5 and 6 Stacks OT6271, OT6272, OT6273, OT6274, OT6275 and OT6276 shall not exceed the following limitations:

(a) Pursuant to 326 IAC 7-4.1-20)(c)(3), sulfur dioxide limits are not specifically listed for Boiler No. 4A. In accordance with this rule, Boiler No, 4A shall burn natural gas only.

(b) Pursuant to 326 IAC 7-4.1-20(a)(1)(A) and (b)(1)(B), the sulfur dioxide emissions from the No. 6 Boiler Stack shall not exceed 0.115 lbs/MMBtu and 81.7 lbs/hr.

(c) Pursuant to 326 IAC 7-4.1-20(a)(2)(A)(i), the sulfur dioxide emissions from the Nos. 1, 2, 3 and 5 Boiler stacks shall not exceed the following during periods when the coke oven gas desulfurization unit is not operating and the Hot Strip Mill Waste Heat Boiler Nos. 1 and 2 are not combusting coke oven gas:

Emission Unit Operating Scenarios		Emission Limit lbs/MMBtu	Emission Limit lbs/hr
Jan - Apr	When four (4) boilers are operating:	0.594	974.5 total
	When three (3) boilers are operating:	0.792	974.5 total
	When two (2) boilers are operating:	1.188	974.5 total

Emission Unit Operating Scenarios		Emission Limit lbs/MMBtu	Emission Limit lbs/hr
May - Oct	When four (4) boilers are operating:	1.006	1650.0 total
	When three (3) boilers are operating:	1.341	1650.0 total
	When two (2) boilers are operating:	2.012	1650.0 total
Nov - Dec	When four (4) boilers are operating:	0.384	630.0 total
	When three (3) boilers are operating:	0.512	630.0 total
	When two (2) boilers are operating:	0.768	630.0 total

(d) Pursuant to 326 IAC 7-4.1-20(a)(2)(A)(ii), the sulfur dioxide emissions from the Nos. 1, 2, 3 and 5 Boiler stacks shall not exceed the following during periods when the coke oven gas desulfurization unit is not operating and the Hot Strip Mill Waste Heat Boiler Nos. 1 and 2 are combusting coke oven gas:

Emission Unit Operating Scenarios		Emission Limit lbs/MMBtu	Emission Limit lbs/hr
Jan - Apr	When four (4) boilers are operating:	0.625	1025.00 total
	When three (3) boilers are operating:	0.833	1025.00 total
	When two (2) boilers are operating:	1.250	1025.00 total
May - Oct	When four (4) boilers are operating:	0.994	1630.0 total
	When three (3) boilers are operating:	1.325	1630.0 total
	When two (2) boilers are operating:	1.988	1630.0 total
Nov - Dec	When four (4) boilers are operating:	0.351	575.0 total
	When three (3) boilers are operating:	0.467	575.0 total
	When two (2) boilers are operating:	0.701	575.0 total

(e) Pursuant to 326 IAC 7-4.1-20(b)(1)(A), the sulfur dioxide emissions from the Nos. 1, 2, 3 and 5 Boiler stacks shall not exceed the following during periods when the coke oven gas desulfurization unit is operating:

Emission Limit lbs/hr	Emission Limit lbs/MMBtu	Emission Limit lbs/hr
When four (4) boilers are operating:	0.427	700.0 total
When three(3) boilers are operating:	0.569	700.0 total
When two (2) boilers are operating:	0.854	700.0 total

D.15.5 PSD Nitrogen Oxides (NO_X) Emission Offset Limitations [326 IAC 2-2] [326 IAC 2-3]

Pursuant to the Minor Source Modification 089-10160-00121 issued, January 13, 2000, 326 IAC 2-2 and 326 IAC 2-3, the NO_X emissions for the TBBH Boiler No. 6 Stack OT6276 shall be limited to the following:

(a) Boiler No. 6 NO_X emissions shall not exceed 0.14 pounds of NO_X per MMBtu of heat input.

(b) Natural gas usage shall be limited to 1,059.7 million cubic feet (MMCF) per twelve (12) consecutive month period with compliance demonstrated at the end of each month. Compliance with this limit will also preclude the Permittee from the requirement to install a continuous emissions monitor (CEM) for NO_X.

(c) Blast furnace gas and natural gas shall be the only fuels combusted in TBBH Boiler No. 6, unless the Permittee receives prior approval from IDEM, OAQ to combust coke oven gas or fuel oil.

(d) These limitations will ensure that the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-3 (Emission Offset) do not apply.

D.15.6 Nitrogen Oxides (NO_X) Limitations [326 IAC 12][40 CFR Part 60, Subpart D and Subpart Db]

(a) Pursuant to CP-089-9568-00121, issued September 21, 1998, 40 CFR 60 Subpart Db, and 326 IAC 12 (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units), NO_X emissions from the TBBH Boiler No. 4A Stack OT6274 shall comply with the following:

(1) The NO_X emissions shall not exceed 0.20 lb/MMBtu when the boiler is burning natural gas only. This is equivalent to 48.8 pounds per hour at a maximum heat input rate of 244 MMBtu per hour.

(2) The NO_X emissions shall not exceed 0.50 lb/MMBtu when the boiler is burning coke oven gas alone. This is equivalent to 122 pounds per hour at a maximum heat input rate of 244 MMBtu per hour.

(b) Pursuant to Minor Source Modification 089-10160-00121, issued January 13, 2000, 326 IAC 12 and 40 CFR 60, Subpart D (Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction or modification is Commenced After August 17, 1971), NO_X emissions from the Turboblower Boiler House (TBBH) Boiler No. 6 Stack OT6276 shall not exceed 0.20 pound per MMBtu of heat input, when the boiler is burning natural gas only.

D.15.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.15.8 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) Not later than twelve (12) months after issuance of this permit (Permit No. T089-7663-00121) or two and one-half (2 ½) years from the date of the most recent compliance test which ever is earlier, in order to demonstrate compliance with Condition D.15.3, the Permittee shall perform PM_{10} testing on the Turboblower Boiler House Boilers Nos. 1, 2, 3 and 5 when all four boilers are operating, using methods as listed in 326 IAC 6.8-4-1 or other methods approved by the Commissioner. This test shall be repeated at least once every two and one-half (2 ½) years from the date of the most recent valid compliance demonstration.

(b) Not later than twelve (12) months after issuance of this permit (Permit No. T089-7663-00121) or two and one-half (2 ½) years from the date of the most recent compliance test which ever is earlier, in order to demonstrate compliance with Condition D.15.3, the Permittee shall perform PM_{10} testing on the Turboblower Boiler House Boiler No. 4A when burning natural gas alone and when burning coke oven gas alone, using methods as listed in 326 IAC 6.8-4-1 or other methods approved by the Commissioner. This test shall be repeated at least once every two and one-half (2 ½) years from the date of the most recent valid compliance demonstration.

(c) Not later than twelve (12) months after issuance of this permit (Permit No. T089-7663-00121) or two and one-half (2 ½) years from the date of the most recent compliance test which ever is earlier, in order to demonstrate compliance with Condition D.15.3, the Permittee shall perform PM_{10} testing on the Turboblower Boiler House Boiler No. 6 when burning blast furnace gas on the main burners alone and natural gas on the pilots, using methods as listed in 326 IAC 6.8-4-1 or other methods approved by the Commissioner. This test shall be repeated at least once every two and one-half (2 ½) years from the date of the most recent valid compliance demonstration.

(d) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation wtih regard to the performance testing required by this condition.

D.15.9 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2]

Pursuant to 326 IAC 7-4.1-2, and in order to comply with conditions D.15.4, , the Permittee shall perform Sulfur Fuel Sampling and Analysis. Section C - Sulfur Fuel Sampling and Analysis contains the Permittee's obligation with regard to the sampling and analysis required by this condition.

D.15.10 Nitrogen Oxide (NO_X) Emissions Monitoring for No. 4A Boiler [40 CFR 60.48b]

(a) Pursuant to 40 CFR 60.48b, the Permittee shall calibrate, maintain, and operate all necessary Predictive emission monitoring systems (PEMS) at Boiler No. 4A stack OT6274.

(b) The Permittee shall comply with Conditions D.15.6(a) on an on going basis using the Predictive Emissions Monitoring System (PEMS) to measure NO_X emission rates by monitoring the steam generating operating conditions as specified in a plan submitted to and approved by IDEM, OAQ, pursuant to 40 CFR 60.49b(c).

(c) In the event that a breakdown of a predictive emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.

(d) The Permittee shall have replacement parts such as flow meters or oxygen meters on hand, in the event a malfunction of the PEMS occurs.

(e) The Permittee shall develop and implement a quality control (QC) and quality assurance (QA) program pursuant to the requirements of 40 CFR Part 60 Appendix F.

(f) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to the requirements of 40 CFR Part 60, Appendix F.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.15.11 Visible Emission Notations

When any one or combination of Boilers No. 1, No. 2, No. 3 and No. 5 combust fuel oil or any combination of fuel oil, and natural gas, blast furnace gas or coke oven gas:

(a) Visible emission notations of the Boilers No. 1, No. 2, No. 3 and/or No. 5 stacks OT6271, OT6372, OT6273 and OT6275 shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation of this permit.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.15.12 Record Keeping Requirements

(a) To document the compliance status with Condition D.15.4, the Permittee shall maintain records in accordance with Section C - Sulfur Dioxide (SO_2) Record Keeping Requirements (Entire Source).

(b) To document the compliance status with condition D.15.5(b), the Permittee shall maintain records of the TBBH Boiler No. 6, natural gas usage.

(c) To document the compliance status with TBBH Boilers 4A, condition D.15.5(a), the Permittee shall maintain records required under 40 CFR 60.49b(c), (g) and (h), as applicable.

(d) To document the compliance status with Conditions D.15.11, the Permittee shall maintain records of once per day visible emission notations when any one or combination of Boilers No. 1, No. 2, No. 3 and/or No. 5 combust fuel oil or any combination of fuel oil and natural gas, blast furnace gas or coke oven gas.

(e) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.15.13 Reporting Requirements

(a) To document the compliance status with conditions D.15.4, the Permittee shall submit a quarterly summary report as specified in Section C – Sulfur Dioxide Reporting (Entire Source) in this permit.

(b) To document the compliance status with condition D.15.5(b), the Permittee shall submit a report not later than thirty (30) days of the end of the quarter containing the TBBH Boiler No. 6, natural gas usage using the form at the end of this permit or its equivalent.

(c) If the Permittee elects to document the compliance status with condition D.15.6, either by monitoring of steam generating unit operating conditions or by operating a predictive emission monitoring system (PEMS) for NO_X emissions on No. 4A Boiler, the Permittee shall also submit reports as required under 40 CFR 60.49b(b) and (h).

(d) The Permittee shall submit an excess emissions report, as required by 40 CFR 60.7(c), not later than thirty (30) days of the end of each quarter for Nos. 4A and 6 boilers.

(e) To document the compliance status with Conditions D.15.11, the Permittee shall maintain records of once per day visible emission notations when Boilers No. 1, No. 2, No. 3 and/or No. 5 combust fuel oil or any combination of fuel oil, and natural gas, blast furnace gas or coke oven gas.

(f) Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition.

(g) These reports do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

D.15.14 Natural Gas Fired Boiler Certification

A semi-annual certification shall be submitted for each of the TBBH Boilers Nos. 1, 2 and 3, with heat input of four hundred (400) million British Thermal unit per hour (MMBtu/hr), No. 4A, with a heat input of two hundred forty-four (244) MMBtu/hr, No. 5, with a heat input of four hundred fifty (450) MMBtu/hr and No. 6 with heat input of five hundred (500) million British Thermal unit per hour (MMBtu/hr) natural gas fired boilers. Section C – General reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition. This report does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.16 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Fugitive Dust Sources consisting of, but not limited to the following:

(a) Paved Roads and Parking Lots

(b) Unpaved Roads and Parking Lots

(c) Batch Transfer-Loading and Unloading Operations

(d) Continuous Transfer In and Out of Storage Piles

(e) Batch Transfer Operations-Slag and Kish Handling

(f) Wind Erosion from Storage Piles and Open Areas

(g) In Plant Transfer by Truck or Rail

(h) In Plant Transfer by Front End Loader or Skip Hoist

(i) Material Processing Facility

(j) Crusher Fugitive Emissions

(k) Material Processing Facility Building Openings

(l) Dust Handling Equipment

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.16.1 Particulate Matter (PM) Lake County Fugitive Dust Limits [326 IAC 6.8-10-4]

Pursuant to 326 IAC 6.8-10-4 (1) (Lake County Fugitive Particulate Matter Control Requirements), compliance with the opacity limits specified in Section C - Fugitive Dust Emissions shall be achieved by controlling fugitive particulate matter emissions according to the revised Fugitive Dust Control Plan (FDCP) submitted on March 1, 2003 (See Attachment A). If it is determined that the control procedures specified in the FDCP do not demonstrate compliance with the fugitive emission limitations, IDEM, OAQ may request that the FDCP be revised and submitted for approval.

Compliance Determination Requirements

D.16.2 Particulate Matter Control

Pursuant to 326 IAC 6.8-10-3 (Lake County Fugitive Particulate Matter Control Requirements), opacity from the activities shall be determined as follows:

(a) Paved Roads and Parking Lots
The average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity

readings for each vehicle pass. The three (3) opacity readings for each vehicle pass shall be taken as follows:

(1) The first will be taken at the time of emission generation.

(2) The second will be taken five (5) seconds later.

(3) The third will be taken five (5) seconds later or ten (10) seconds after the first.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.

(b) Unpaved Roads and Parking Lots
The fugitive particulate emissions from unpaved roads shall be controlled by the implementation of a work program and work practice under the fugitive dust control plan.

(c) Batch Transfer
The average instantaneous opacity shall consist of the average of three (3) opacity readings taken five (5) seconds, ten (10) seconds, and fifteen (15) seconds after the end of one (1) batch loading or unloading operation. The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume.

(d) Continuous Transfer
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9. The opacity readings shall be taken at least four (4) feet from the point of origin.

(e) Wind Erosion from Storage Piles and Exposed Areas
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9, except that the opacity shall be observed at approximately four (4) feet from the surface at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. The limitations may not apply during periods when application of fugitive particulate control measures is either ineffective or unreasonable due to sustained very high wind speeds. During such periods, the company must continue to implement all reasonable fugitive particulate control measures and maintain records documenting the application of measures and the basis for a claim that meeting the opacity limitation was not reasonable given prevailing wind conditions.

(f) Material Transported by Truck or Rail
Compliance with this limitation shall be determined by 40 CFR 60, Appendix A, Method 22, except that the observation shall be taken at approximately right angles to the prevailing wind from the leeward side of the truck or railroad car. Material transported by truck or rail that is enclosed and covered shall be considered in compliance with the in plant transportation requirement.

(g) Material Transported by Front End Loader or Skip Hoist
Compliance with this limitation shall be determined by the average of three (3) opacity readings taken at five (5) second intervals. The three (3) opacity readings shall be taken as follows:

(1) The first will be taken at the time of emission generation.

(2) The second will be taken five (5) seconds later.

(3) The third will be taken five (5) seconds later or ten (10) seconds after the first.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand at least fifteen (15) feet from the plume approximately and at right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.

(h) Material Processing Limitations

(1) Compliance with stack opacity limitations from material processing facilities shall be determined using 40 CFR 60, Appendix A, Method 9.

(2) Compliance with the opacity limitations for fugitive particulate emissions from material processing equipment, except from a crusher at which a capture system is not used, shall be determined using 40 CFR 60, Appendix A, Method 9.

(3) Compliance with the opacity limitations for fugitive particulate emissions from a crusher at which a capture system is not used, shall be determined using 40 CFR 60, Appendix A, Method 9.

(4) Compliance with the opacity limitations for fugitive particulate emissions from a building enclosing all or part of the material processing equipment, except from a vent in the building shall be determined using 40 CFR 60, Appendix A, Method 22.

(5) Compliance with the opacity limitations for fugitive particulate emissions from building vents shall be determined using 40 CFR 60, Appendix A, Method 5 or 17 or 40 CFR 60, Appendix A, Method 9.

(i) Dust Handling Equipment
Compliance with this standard shall be determined by 40 CFR 60, Appendix A, Method 9.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.16.3 Record Keeping Requirements

Pursuant to 326 IAC 6.8-10-4(4) (Lake County Fugitive Particulate Matter Control Requirements):

(a) The source shall keep the following documentation to show compliance with each of its control measures and control practices:

(1) A map or diagram showing the location of all emission sources controlled, including the location, identification, length, and width of roadways.

(2) For each application of water or chemical solution to roadways, the following shall be recorded:

(A) The name and location of the roadway controlled

(B) Application rate

(C) Time of each application

(D) Width of each application

(E) Identification of each method of application

(F) Total quantity of water or chemical used for each application

(G) For each application of chemical solution, the concentration and identity of the chemical

(H) The material data safety sheets for each chemical

(3) For application of physical or chemical control agents not covered by clause (B), the following:

(A) The name of the agent

(B) Location of application

(C) Application rate

(D) Total quantity of agent used

(E) If diluted, percent of concentration

(F) The material data safety sheets for each chemical

(4) A log recording incidents when control measures were not used and a statement of explanation.

(5) Copies of all records required by this section shall be submitted to the department within twenty (20) working days of a written request by the department.

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.16.4 Reporting Requirements

(a) Pursuant to 326 IAC 6.8-10-4(4)(G) (Lake County Fugitive Particulate Matter Control Requirements), a quarterly report shall be submitted to the department stating the following:

(1) The dates any required control measures were not implemented

(2) A listing of those control measures

(3) The reasons that the control measures were not implemented

(4) Any corrective action taken

(b) These reports shall be submitted not later thirty (30) calendar days following the end of the quarter being reported. Section C – General Reporting Requirements contains the Permittee’s obligation with regard to the reporting required by this condition.

Section D.17 **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]: Insignificant activities as follows:

(a) Specifically regulated insignificant activities:

(1) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-5][326 IAC 8-3-6][326 IAC 8-9-1]

(2) Cleaners and solvents characterized as follows:

(A) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38°C (100°F) or;

(B) Having a vapor pressure equal to or less than 0.7 kPA; 5mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.[326 IAC 8-3-5][326 IAC 8-3-6][326 IAC 8-9-1]

(3) The following VOC and HAP storage containers:

(A) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons. [326 IAC 8-9-1]

(B) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids. [326 IAC 8-9-1]

(4) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6.8-10-3]

(5) Any of the following structural steel and bridge fabrication activities:

(A) Cutting 200,000 linear feet or less of one inch (10) plate or equivalent.

(B) Using 80 tons or less of welding consumables. [326 IAC 6.8-10-3]

(6) Conveyors as follows:

(A) Covered conveyor for coal or coke conveying of less than or equal to 360 tons per day; [326 IAC 6.8-10-3]

(B) Uncovered coal conveying of less than or equal to 120 tons per day. [326 IAC 6.8-10-3]

(7) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6.8-10-3]

(8) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6.8-1-2(a)]

(9) Vents from ash transport systems not operated at positive pressure. [326 IAC 6.8-1- 2(a)]

(10) Fuel dispensing activities, including the following:

(A) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons q per day and filling storage tanks having a capacity equal to or less than ten thousand hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment. [326 IAC 8-9-1]

(B) A petroleum fuel other than gasoline dispensing facility, having a storage tank capacity less than or equal to ten thousand five hundred (10,500) gallons, and dispensing three thousand five hundred (3,500) gallons per day or less. A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, dispensing less than or equal to 230,000 gallons per month. [326 IAC 8-9-1]

(b) Other Insignificant Activities

(1) Space heaters, process heaters, or boilers using the following fuels:

(A) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.

(B) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000)Btu per hour and firing fuel containing equal or less than five-tenths percent (0.5%) sulfur by weight.

(2) Equipment powered by diesel fuel fired or natural gas fired internal combustion engines of capacity equal to or less than five hundred thousand (500,000) British thermal units per hour except where total capacity of equipment operated by one (1) stationary source as defined by subdivision (38) exceeds two million (2,000,000) British thermal units per hour.

(3) Combustion source flame safety purging on startup.

(4) Refractory storage not requiring air pollution control equipment.

(5) Equipment used exclusively for the following:

(A) Packaging lubricants and greases.

(B) Filling drums, pails, or other packaging containers with the following: Lubricating oils, Waxes and Greases.

(6) Application of: oils; greases; lubricants; and nonvolatile material; as temporary protective coatings.

(7) Closed loop heating and cooling systems.

(8) Rolling oil recovery systems.

(9) Groundwater oil recovery wells.

(10) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

(11) Water runoff ponds for petroleum coke-cutting and coke storage piles.

(12) Any operation using aqueous solutions containing less than 1% by weight of VOCs, excluding HAPS.

(13) Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPs.

(14) Noncontact cooling tower systems with forced or induced draft cooling tower system not regulated under a NESHAP.

(15) Quenching operations used with heat treating operations.

(16) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(17) Heat exchanger cleaning and repair.

(18) Process vessel degassing and cleaning to prepare for internal repairs.

(19) Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal.

(20) Paved and unpaved roads and parking lots with public access.

(21) Underground conveyors.

(22) Asbestos abatement projects regulated by 326 IAC 14-10.

(23) Purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.

(24) Flue gas conditioning systems and associated chemicals, such as the following: sodium sulfate, ammonia and sulfur trioxide.

(25) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

(26) Blow down for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(27) Activities associated with emergencies, including the following:

(A) On-site fire training approved by the department.

(B) Emergency generators as follows: Gasoline generators not exceeding one hundred ten (110) horsepower , Diesel generators not exceeding one thousand six hundred (1,600) horsepower and natural gas turbines or reciprocating engines not exceeding one thousand six hundred (1,600) horsepower.

(C) Stationary fire pump.

(28) Purge double block and bleed valves.

(29) A laboratory as defined in 326 IAC 2-7-1(21)(D).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.17.1 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3]

(a) Pursuant to 326 IAC 6-4-2:

(1) The brazing equipment, cutting torches, soldering equipment, welding equipment, structural steel and bridge fabrication, covered conveyors, dust collector vents associated with coal bunkers and coal scale, grinding and machining operations and ash transport systems vents generating fugitive dust shall be in violation of this rule (326 IAC 6-4) if any of the following criteria are violated:

(A) A source or combination of sources which cause to exist fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations as determined by the following formula:

$$P = \frac{100\ (R) - U)}{U}$$

Where
P = Percentage increase
R = Number of particles of fugitive dust measured at downward receptor site
U = Number of particles of fugitive dust measured at upwind or background site

(B) The fugitive dust is comprised of fifty percent (50%) or more respirable dust, then the percent increase of dust concentration in subdivision (1) of this section shall be modified as follows:

$$PR = (1.5 \pm N)\ P$$

Where
N = Fraction of fugitive dust that is respirable dust;
PR = allowable percentage increase in dust concentration above background; and
P = no value greater than sixty-seven percent (67%).

(C) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.

(D) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subdivisions (1), (2) or (3) of this section. 326 IAC 6-4-2(4) is not federally enforceable.

(2) Pursuant to 326 IAC 6-4-6(6) (Exceptions), fugitive dust from a source caused by adverse meteorological conditions will be considered an exception to this rule (326 IAC 6-4) and therefore not in violation.

(b) Pursuant to 326 IAC 6.8-10-3 Lake County Fugitive Particulate Matter Emissions Limitations, fugitive emissions from the brazing equipment, cutting torches, soldering equipment, welding equipment, structural steel and bridge fabrication, covered conveyors, dust collector vents associated with coal bunkers and coal scale, grinding and machining operations and ash transport systems vents generating fugitive dust shall comply with the emissions limitations in Section C.5 - Fugitive Dust Emissions.

D.17.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2 (Cold Cleaner Degreaser Operation)]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations) for cold cleaning operations existing as of January 1, 1980, located, Lake County and which have the potential emissions of one hundred (100) tons per year or greater of VOC, the Permittee shall:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operation requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere;

(h) repair solvent leaks immediately, or shut down the degreaser;

(i) Store waste solvent only in covered containers and not dispose of waste solvent or transfer to another party, such that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.17.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)]

(a) Pursuant to 326 IAC 8-3-5(a), the owner or operator of a cold cleaner degreaser without remote solvent reservoirs existing as of July 1, 1990, located in Clark, Elkhart, Floyd, Lake, Marion, Porter or St. Joseph counties shall ensure that the following requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

D.17.6 Volatile Organic Compounds (VOC) [326 IAC 8-3-8] (Material requirements for cold cleaning degreasers)

Pursuant to 326 IAC 8-3-8 (Material requirements for cold cleaning degreasers), the users, providers, and manufacturers of solvents for use in cold cleaning degreasers in Lake County except for solvents intended to be used to clean electronic components shall do the following:

(a) On and after November 1, 1999, no person shall Operate a cold cleaning degreaser with a solvent vapor pressure that exceeds two (2) millimeters of mercury (thirty-eight thousandths (0.038) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(b) On and after May 1, 2001, no person shall Operate a cold cleaning degreaser with a solvent vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths

(0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(c) On and after November 1, 1999, all persons subject to the requirements of 326 IAC 8-3-8 (c)(1)(B) and (c)(2)(B) shall maintain each of the following records for each purchase:

(1) The name and address of the solvent supplier.

(2) The date of purchase.

(3) The type of solvent.

(4) The volume of each unit of solvent.

(5) The total volume of the solvent.

(6) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(d) All records required by 326 IAC 8-3-8 (d) shall be retained on-site for the most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period.

D.17.7 Volatile Organic Liquid Storage Vessels [326 IAC 8-9-1]

(a) Pursuant to 326 IAC 8-9-1 (a) and (b) (Volatile Organic Liquid Storage Vessels), on and after October 1, 1995, stationary vessels used to store volatile organic liquids (VOL), that are located in Lake County with a capacity of less than thirty nine thousand (39,000) gallons are subject to the reporting and record keeping requirements of this rule. The VOL storage vessels are exempted from all other provisions of this rule.

(b) Pursuant to 326 IAC 8-9-6 (a) and (b), the Permittee of each Volatile Organic Liquid Storage vessel to which 326 IAC 8-9-1 applies shall maintain the following records for the life of the vessel and submit a report to IDEM, OAQ containing the following for each vessel:

(1) The vessel identification number,

(2) The vessel dimensions, and

(3) The vessel capacity.

Section D.18 **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]: Note: Complete Descriptions are shown in Section A.2.

CASP A

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln No. 1, identified as FERA1, and one (1) integral afterburner, identified as FERAB A1, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR1015), one (1) cyclone (OR-A-09-CY-1025), and one (1) baghouse (OR-A-09-DC1030), in series, exhausting to stack OR-A-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERA2, and one (1) integral afterburner, identified as FERAB A2, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR2015), one (1) cyclone (OR-A-09-CY-2025), and one (1) baghouse (OR-A-09-DC2030), in series, exhausting to stack OR-A-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERA3, and one (1) integral afterburner, identified as FERAB A3, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR3015), one (1) cyclone (OR-A-09-CY-3025), and one (1) baghouse (OR-A-09-DC3030), in series, exhausting to stack OR-A-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERA4, and one (1) integral afterburner, identified as FERAB A4, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR4015), one (1) cyclone (OR-A-09-CY-4025), and one (1) baghouse (OR-A-09-DC4030), in series, exhausting to stack OR-A-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM A1 - RCLM A4, approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FERA1 - FERA4, consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 ^{0}F - 800 ^{0}F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB A1 - FERAB A4, respectively.
(2) Four (4) coal tar surge tanks, one (1) per FER.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRA1, and one (1) afterburner, identified as PFRAB A1, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-A-10-SR1010), one (1) cyclone (OR-A-10-CY-1115), and one (1) baghouse (OR-A-10-DC1020), in series, exhausting to stack OR-A-10-ST1025.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRA2, and one (1) afterburner, identified as PFRAB A2, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-A-10-SR2010), one (1) cyclone (OR-A-10-CY-2115), and one (1) baghouse (OR-A-10-DC2020), in series, exhausting to stack OR-A-10-ST2025.

CASP B

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB1, and one (1) integral afterburner, identified as FERAB B1, exhausting through a heat exchanger to one (1) spray scrubber (OR-B-09-SR1015), one (1) cyclone (ORB-09-CY-1025), and one (1) baghouse (OR-B-09-DC1030), in series, exhausting to stack OR-B-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB2, and one (1) integral afterburner, identified as FERAB B2, exhausting through a heat exchanger to one (1) spray scrubber (OR-B-09-SR2015), one (1) cyclone (OR-B09-CY-2025), and one (1) baghouse (OR-B-09-DC2030), in series, exhausting to stack OR-B-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB3, and one (1) integral afterburner, identified as FERAB B3, exhausting through a heat exchanger to one (1) spray scrubber (OR-B-09-SR3015), one (1) cyclone (OR-B-09-CY-3025), and one (1) baghouse (OR-B-09-DC3030), in series, exhausting to stack OR-B-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB4, and one (1) integral afterburner, identified as FERAB B4, exhausting through a heat exchanger to one (1) spray scrubber (OR-B-09-SR4015), one (1) cyclone (OR-B-09-CY-4025), and one (1) baghouse (OR-B-09-DC4030), in series, exhausting to stack OR-B-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM B1 - RCLM B4, approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FERB1 - FERB4, consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 ^{0}F - 800 ^{0}F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB B1 - FERAB B4, respectively.
(2) Four (4) coal tar surge tanks, one (1) per FER.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRB1, and one (1) afterburner, identified as PFRAB B1, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-B-10-SR1010), one (1) cyclone (OR-B-10-CY-1115), and one (1) baghouse (OR-B-10-DC1020), in series, exhausting to stack OR-B-10-ST1025.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRB2, and one (1) afterburner, identified as PFRAB B2, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-B10-SR2010), one (1) cyclone (OR-B-10-CY-2115), and one (1) baghouse (OR-B-10-DC2020), in series, exhausting to stack OR-B-10-ST2025.

CASP C

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC1, and one (1) integral afterburner, identified as FERAB C1, exhausting through a heat exchanger to one (1) spray scrubber (OR-C-09-SR1015), one (1) cyclone (OR-C-09-CY-1025), and one (1) baghouse (OR-C-09-DC1030), in series, exhausting to stack OR-C-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC2, and one (1) integral afterburner, identified as FERAB C2, exhausting through a heat exchanger to one (1) spray scrubber (OR-C-09-SR2015), one (1) cyclone (OR-C-09-CY-2025), and one (1) baghouse (OR-C-09-DC2030), in series, exhausting to stack OR-C-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC3, and one (1) integral afterburner, identified as FERAB C3, exhausting through a heat exchanger to one (1) spray scrubber (OR-C-09-SR3015), one (1) cyclone (OR-C -09-CY-3025), and one (1) baghouse (OR-C-09-DC3030), in series, exhausting to stack OR-C-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC4, and one (1) integral afterburner, identified as FERAB C4, exhausting through a heat exchanger to one (1) spray scrubber (OR-C-09-SR4015), one (1) cyclone (OR-C-09-CY-4025), and one (1) baghouse (OR-C-09-DC4030), in series, exhausting to stack OR-C-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM C1 - RCLM C4, approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FERC1 - FERC4, consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 ^{0}F - 800 ^{0}F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB C1 - FERAB C4, respectively.
(2) Four (4) coal tar surge tanks, one (1) per FER.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRC1, and one (1) afterburner, identified as PFRAB C1, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-C-10-SR1010), one (1) cyclone (OR-C-10-CY-1115), and one (1) baghouse (OR-C-10-DC1020), in series, exhausting to stack OR-C-10-ST1025.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRC2, and one (1) afterburner, identified as PFRAB C2, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-C-10-SR2010), one (1) cyclone (OR-C-10-CY-2115), and one (1) baghouse (OR-C-10-DC2020), in series, exhausting to stack OR-C-10-ST2025.

CASP D

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD1, and one (1) integral afterburner, exhausting through a heat exchanger to one (1) spray scrubber (OR-D-09-SR1015), one (1) cyclone (OR-D-09-CY-1025), and one (1) baghouse (OR-D-09-DC1030), in series, exhausting to stack OR-D-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD2, and one (1) integral afterburner, identified as FERAB D2, exhausting through a heat exchanger to one (1) spray scrubber (OR-D-09-SR2015), one (1) cyclone (OR-D -09-CY-2025), and one (1) baghouse (OR-D-09-DC2030), in series, exhausting to stack OR-D-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD3, and one (1) integral afterburner, identified as FERAB D3, exhausting through a heat exchanger to one (1) spray scrubber (OR-D-09-SR3015), one (1) cyclone (OR-D-09-CY-3025), and one (1) baghouse (OR-D-09-DC3030), in series, exhausting to stack OR-D-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD4, and one (1) integral afterburner, identified as FERAB D4, exhausting through a heat exchanger to one (1) spray scrubber (OR-D-09-SR4015), one (1) cyclone (OR-D-09-CY-4025), and one (1) baghouse (OR-D-09-DC4030), in series, exhausting to stack OR-D-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM D1 - RCLM D4, approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FERD1 - FERD4, consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 ^{0}F - 800 ^{0}F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB D1 - FERAB D4, respectively.
(2) Four (4) coal tar surge tanks, one (1) per FER.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRD1, and one (1) afterburner, identified as PFRAB D1, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-D-10-SR1010), one (1) cyclone (OR-D-10-CY-1115), and one (1) baghouse (OR-D-10-DC1020), in series, exhausting to stack OR-D-10-ST1025.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRD2, and one (1) afterburner, identified as PFRAB D2, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-D-10-SR2010), one (1) cyclone (OR-D-10-CY-2115), and one (1) baghouse (OR-D-10-DC2020), in series, exhausting to stack OR-D-10-ST2025.

(j) Four (4) coal tar reclaimer systems, identified as RCLM A1 - RCLM A4, approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FER A1 - FER A4, consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 ^{0}F - 800 ^{0}F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB A1 - FERAB A4, respectively.
(2) Four (4) coal tar surge tanks, one (1) per FER.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.18.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10/NOx/SO2/CO/VOC [326 IAC 2-2]
Nonattainment New Source Review (NSR) Minor Limit PM2.5/SO2 [326 IAC 2-1.1-5]

Pursuant to 326 IAC 2-2 (PSD), 326 IAC 2-3 (Emission Offset), and 326 IAC 2-1.1-5 (Nonattainment New Source Review), and in order to render the requirements of 326 IAC 2-2 (PSD), 326 IAC 2-3 (Emission Offset), and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable to the Carbon Alloy Synthesis Plant (CASP) modifications (Significant Source Modification (SSM) No. 089-28848-00121 and Significant Permit Modification (SPM) No. 089-29236-00121), the Permittee shall comply with the following:

(a) PM, PM_{10}, $PM_{2.5}$, NOx, SO2, CO, and VOC emissions from the following units shall not exceed the emission limits listed in the table below:

Unit ID	Emission Limits (lbs/hr)				
	PM/ PM10/ PM2.5 (each)	NOx	SO2	CO	VOC
CASP A - Feed Enhancement Reactors (FER)					
FERA1	0.40	0.80	0.10	1.10E-07	0.25
FERA2	0.40	0.80	0.10	1.10E-07	0.25
FERA3	0.40	0.80	0.10	1.10E-07	0.25
FERA4	0.40	0.80	0.10	1.10E-07	0.25
CASP A - Particle Fusion Reactors (PFR)					
PFRA1	3.10	3.20	7.60	9.20E-06	0.25
PFRA2	3.10	3.20	7.60	9.20E-06	0.25
CASP B - Feed Enhancement Reactors (FER)					
FERB1	0.40	0.80	0.10	1.10E-07	0.25
FERB2	0.40	0.80	0.10	1.10E-07	0.25
FERB3	0.40	0.80	0.10	1.10E-07	0.25
FERB4	0.40	0.80	0.10	1.10E-07	0.25

Unit ID	Emission Limits (lbs/hr)				
	PM/ PM10/ PM2.5 (each)	NOx	SO2	CO	VOC
CASP B - Particle Fusion Reactors (PFR)					
PFRB1	3.10	3.20	7.60	9.20E-06	0.25
PFRB2	3.10	3.20	7.60	9.20E-06	0.25
CASP C - Feed Enhancement Reactors (FER)					
FERC1	0.40	0.80	0.10	1.10E-07	0.25
FERC2	0.40	0.80	0.10	1.10E-07	0.25
FERC3	0.40	0.80	0.10	1.10E-07	0.25
FERC4	0.40	0.80	0.10	1.10E-07	0.25
CASP C - Particle Fusion Reactors (PFR)					
PFRC1	3.10	3.20	7.60	9.20E-06	0.25
PFRC2	3.10	3.20	7.60	9.20E-06	0.25
CASP D - Feed Enhancement Reactors (FER)					
FERD1	0.40	0.80	0.10	1.10E-07	0.25
FERD2	0.40	0.80	0.10	1.10E-07	0.25
FERD3	0.40	0.80	0.10	1.10E-07	0.25
FERD4	0.40	0.80	0.10	1.10E-07	0.25
CASP D - Particle Fusion Reactors (PFR)					
PFRD1	3.10	3.20	7.60	9.20E-06	0.25
PFRD2	3.10	3.20	7.60	9.20E-06	0.25

(b) The control devices for each of the above Feed Enhancement Reactors (FER) shall achieve one hundred percent (100%) capture of the emissions generated from the associated FER process.

(c) The control devices for each of the above Particle Fusion Reactors (PFR) shall achieve one hundred percent (100%) capture of the emissions generated from the associated PFR process.

Compliance with these limits, in conjunction with other limits taken as part of the CASP modification (SSM 089-22848-00121 and SPM 089-29236-00121), will ensure the following:

(d) The PM, PM10, NOx, SO2, VOC, and CO net emissions increase from the CASP modifications (SSM 089-22848-00121 and SPM 089-29236-00121) shall be less than twenty-five (25), fifteen (15), forty (40), forty (40), forty (40) and one hundred (100) tons, respectively, per twelve (12) consecutive month period, with compliance determined at the end of each month. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable to these modifications.

(e) The PM2.5 and SO2 net emissions increase from the CASP modifications (SSM 089-22848-00121 and SPM 089-29236-00121) shall be less than ten (10) and forty (40) tons, respectively, per twelve (12) consecutive month period, with compliance determined at the end of each month. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) are rendered not applicable to these modifications.

D.18.1.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10 [326 IAC 2-2]
Nonattainment New Source Review (NSR) Minor Limit PM2.5/SO2 [326 IAC 2-1.1-5]

On June 27, 2008, the U.S. EPA issued Notices of Violation (NOV) to the Permittee for alleged violations regarding excess emissions from the coke oven batteries. Therefore the Permit Shield in Section B - Permit Shield does not shield the Permittee from possible enforcement actions initiated by U.S. EPA, IDEM or citizens. Compliance with the terms of this permit does not serve as proof of compliance for the emission units or the matters addressed in the NOVs. Following resolution of this enforcement action, IDEM will reopen this permit, if necessary, to incorporate a compliance schedule or any new applicable requirements. The standard language of Section B - Permit Shield does not shield any activity on which the permit is silent.

D.18.2 Particulate Emission Limitation [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), the Permittee shall not allow or permit discharge to the atmosphere any gases which contain particulate matter in excess of 0.03 grain per dry standard cubic foot (dscf) from each of the facilities listed in this section.

D.18.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for each of the facilities and control devices listed in this section. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.18.4 Particulate Control

(a) In order for all units to comply with Conditions D.18.1 and D.18.2, each baghouse and cyclone listed in this section shall be in operation and controlling particulate at all times when its associated facility/emissions unit is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.18.5 Spray Scrubber Operation

In order for all units to comply with Condition D.18.1, each spray scrubber listed in this section shall be in operation at all times when its associated facility/emissions unit is in operation.

In order to comply with Condition D.18.1, each spray scrubber associated with a FER shall be in operation and capturing emissions from its associated FER at all time the associated FER is in operation.

D.18.6 Feed Enhancement Reactor (FER) Afterburner and Particle Fusion Reactor (PFR) Afterburner Operation

In order to comply with Condition D.18.1, the Feed Enhancement Reactor afterburners FERAB A1, FERAB A2, FERAB B1, FERAB B2, FERAB C1, FERAB C2, FERAB D1, and FERAB D2 shall be in operation and combusting the process emissions at all times when the associated Feed Enhancement Reactor is in operation.

In order to comply with Condition D.18.1, the Particle Fusion Reactor afterburners PFRAB A1, PFRAB A2, PFRAB B1, PFRAB B2, PFRAB C1, PFRAB C2, PFRAB D1, and PFRAB D2 shall be in operation and control VOC emissions at all times when the associated Particle Fusion Reactor is in operation.

In order to comply with Condition D.18.1, all PFR fans exhausting to the afterburners shall be in operation and capturing emissions from its associated PFR at all time the associated PFR is in operation.

D.18.7 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) Not later than 180 days after the startup of CASP A, the Permittee shall perform PM, PM10, PM2.5, NOx, SO2, CO, and VOC testing of one (1) of the four (4) Feed Enhancement Reactors (FERA1, FERA2, FERA3, FERA4) and one (1) of the two (2) Particle Fusion Reactor (PFRA1, PFRA2) utilizing methods approved by the commissioner at least once every 2.5 years from the date of the most recent compliance demonstration.

(1) Until such time that all Feed Enhancement Reactors (FERA1, FERA2, FERA3, FERA4) have been tested once, subsequent testing shall be conducted for a FER that has not yet demonstrated compliance. After such time that all Feed Enhancement Reactors (FERA1, FERA2, FERA3, FERA4) have been tested, testing shall be conducted for the FER with the longest lapse in time since the most recent compliance demonstration.

(2) Subsequent testing of the Particle Fusion Reactors (PFRA1, PFRA2) shall be conducted for the Particle Fusion Reactor not tested in the most recent compliance demonstration.

(b) Not later than 180 days after the startup of CASP B, the Permittee shall perform PM, PM10, PM2.5, NOx, SO2, CO, and VOC testing of one (1) of the four (4) Feed Enhancement Reactors (FERB1, FERB2, FERB3, FERB4) and one (1) of the two (2) Particle Fusion Reactor (PFRB1, PFRB2) utilizing methods approved by the commissioner at least once every 2.5 years from the date of the most recent compliance demonstration.

(1) Until such time that all Feed Enhancement Reactors (FERB1, FERB2, FERB3, FERB4) have been tested once, subsequent testing shall be conducted for a FER that has not yet demonstrated compliance. After such time that all Feed Enhancement Reactors (FERB1, FERB2, FERB3, FERB4) have been tested, testing shall be conducted for the FER with the longest lapse in time since the most recent compliance demonstration.

(2) Subsequent testing of the Particle Fusion Reactors (PFRB1, PFRB2) shall be conducted for the Particle Fusion Reactor not tested in the most recent compliance demonstration.

(c) Not later than 180 days after the startup of CASP C, the Permittee shall perform PM, PM10, PM2.5, NOx, SO2, CO, and VOC testing of one (1) of the four (4) Feed Enhancement Reactors (FERC1, FERC2, FERC3, FERC4) and one (1) of the two (2) Particle Fusion Reactor (PFRC1, PFRC2) utilizing methods approved by the commissioner at least once every 2.5 years from the date of the most recent compliance demonstration.

(1) Until such time that all Feed Enhancement Reactors (FERC1, FERC2, FERC3, FERC4) have been tested once, subsequent testing shall be conducted for a FER that has not yet demonstrated compliance. After such time that all Feed Enhancement Reactors (FERC1, FERC2, FERC3, FERC4) have been tested, testing shall be conducted for the FER with the longest lapse in time since the most recent compliance demonstration.

(2) Subsequent testing of the Particle Fusion Reactors (PFRC1, PFRC2) shall be conducted for the Particle Fusion Reactor not tested in the most recent compliance demonstration.

(d) Not later than 180 days after the startup of CASP D, the Permittee shall perform PM, PM10, PM2.5, NOx, SO2, CO, and VOC testing of one (1) of the four (4) Feed Enhancement Reactors (FERD1, FERD2, FERD3, FERD4) and one (1) of the two (2) Particle Fusion Reactor (PFRD1, PFRD2) utilizing methods approved by the commissioner at least once every 2.5 years from the date of the most recent compliance demonstration.

(1) Until such time that all Feed Enhancement Reactors (FERD1, FERD2, FERD3, FERD4) have been tested once, subsequent testing shall be conducted for a FER that has not yet demonstrated compliance. After such time that all Feed Enhancement Reactors (FERD1, FERD2, FERD3, FERD4) have been tested, testing shall be conducted for the FER with the longest lapse in time since the most recent compliance demonstration.

(2) Subsequent testing of the Particle Fusion Reactors (PFRD1, PFRD2) shall be conducted for the Particle Fusion Reactor not tested in the most recent compliance demonstration.

(e) In lieu of performing the initial compliance tests for PM10 and PM2.5 in accordance with the schedules set forth in Condition D.18.7 (a) through (e), should the new or revised condensable PM test method(s) referenced in U.S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5) signed on May 8, 2008, fail to be published at the time of the required testing , the Permittee may elect to test not later than 180 days after publication of the new or revised condensable PM test method(s) referenced in U.S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5) signed on May 8, 2008. Subsequent testing for PM10 and PM2.5 shall not be effected by this condition (D.18.7(e)) and shall be performed in accordance with Condition D.18.7 (a) through (e).

(f) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.18.8 Feed Enhancement Reactor Afterburner and Particle Fusion Reactor Afterburner Temperature Monitoring

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the Feed Enhancement Reactor afterburners (FERAB A1, FERAB A2, FERAB B1, FERAB B2, FERAB C1, FERAB C2, FERAB D1, and FERAB D2) and the Particle Fusion Reactor afterburners (PFRAB A1, PFRAB A2, PFRAB B1, PFRAB B2, PFRAB C1, PFRAB C2, PFRAB D1, and PFRAB D2) for measuring operating temperature. For the purpose of this condition, continuous means no less often than once per fifteen (15) minutes. The output of this system shall be recorded as a 3-hour average. From the date of startup until the stack test results are available, the Permittee shall operate each afterburner at or above the 3-hour average temperature of 1,850°F.

(b) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with limits in Condition D.18.1.

(c) On and after the date the stack test results are available, the Permittee shall operate each afterburner at or above the 3-hour average temperature as observed during the compliant stack test.

D.18.9 Coal Tar Reclaimer Temperature Monitoring

A continuous monitoring system shall be calibrated, maintained, and operated on each of the coal tar reclaimer systems listed in this section for measuring outlet exhaust temperature of each reformer. For the purposes of this condition, continuous monitoring shall mean no less often than once per minute. The output of this system shall be recorded as a 15-min average. The Permittee shall operate each coal tar reformer at or above the 15-minute average temperature of 300 °F.

D.18.10 Scrubber Monitoring

(a) The Permittee shall monitor the pH of the scrubbing liquid, exhaust air stream pressure drop, and pump discharge pressure of all spray scrubbers listed in this section at least once per day when the spray tower absorber is in operation.

(b) When for any one reading, the pH of the scrubbing liquid is less than 5.0, or a minimum established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pH reading that is less than 5.0 is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(c) When for any one reading, the exhaust air stream pressure drop is outside the normal range of 1.0 and 6.0 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An exhaust air stream pressure drop that is outside the range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(d) When for any one reading, the pump discharge pressure is outside a range of 55 and 70 pounds per square inch of water (psi), or a range established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pump discharge pressure that is outside a range of 55 and 70 psi, or a range established during the latest stack test, is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(e) The instruments used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.18.11 Visible Emissions Notations

(a) Visible emission notations of all the baghouse stack exhausts listed in this section shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, at least eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal missions are observed, the Permittee shall take reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal reading is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.18.12 Parametric Monitoring Notations

The Permittee shall record the pressure drop across each baghouse and cyclone listed in this section, at least once per day when the associated facility/emissions unit is in operation. When for any one reading, the pressure drop across a baghouse is outside the normal range of ~~1.0~~ **0.5** and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps, shall be considered a deviation from this permit.

The instruments used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.18.13 Broken or Failed Bag Detection

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later that the completion of the processing of the material in the line or emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

D.18.14 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.18.15 Record Keeping Requirements

(a) To document the compliance status with Condition D.18.8, the Permittee shall maintain the continuous temperature records (on a 3-hour average basis) for the Feed Enhancement Reactor afterburners and Particle Fusion Reactor afterburners and the 3-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

(b) To document the compliance status with Condition D.18.9, the Permittee shall maintain the continuous temperature records (on a 15-minute average basis) for the coal tar reformers.

(c) To document the compliance status with Condition D.18.10, the Permittee shall maintain daily records of the scrubber operating parameters required by that condition. The Permittee shall include in its daily record when a reading is not taken and the reason for the lack of a reading (e.g. the process did not operate that day).

(d) To document the compliance status with Condition D.18.11, the Permittee shall maintain daily records of the visible emission notations of the stack exhaust of each baghouse listed in this section. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (i.e. the process did not operate that day).

(e) To document the compliance status with Condition D.18.12, the Permittee shall maintain daily records of the pressure drop across each baghouse and cyclone listed in this section. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (i.e. the process did not operate that day).

(f) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

Section D.19 **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]: Note: Complete Descriptions are shown in Section A.2.

CASP A

(a) Raw Material Receiving Handling and Silos A, identified as RMRHSA, consisting of the following:

(1) One (1) CDA1 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) baghouse (OR-A-01-DC1105), exhausting to stack OR-A-01-ST1105.
(2) One (1) CDA2 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) dust collector (OR-A-01-DC2105), exhausting to stack OR-A-01-ST2105.
(3) Five (5) dry coal storage silos, ducted to dedicated baghouses (OR-A-02-DC1070, OR-A-02-DC2070, OR-A-02-DC3070, OR-A-02-DC4070, and OR-A-02-DC5070, respectively), exhausting to stacks OR-A-02-ST1070, OR-A-02-ST2070, OR-A-02-ST3070, OR-A-02-ST4070, and OR-A-02-ST5070, respectively.
(4) Five (5) blend #1 weigh feeders and one (1) drag conveyor, ducted to one (1) baghouse (OR-A-03-DC1105), exhausting to stack OR-A-03-ST1105.
(5) Four (4) blend #1 feed hoppers and two (2) blend #1 hopper feed drag conveyors, ducted to one (1) baghouse (OR-A-04-DC1105), exhausting to stack OR-A-04-ST1105.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDA1, ducted to one (1) cyclone (OR-A-01-CY-1305) and one (1) dust collector (OR-A-01-DC1205), in series, exhausting to stack OR-A-01-ST1205.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCA1, ducted to one (1) dust collector (OR-A-02-DC1105), exhausting to stack OR-A-02-ST1105.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDA2, ducted to one (1) cyclone (OR-A-01-CY-2305) and one (1) dust collector (OR-A-01-DC2205), in series, exhausting to stack OR-A-01-ST2205.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCA2, ducted to one (1) dust collector (OR-A-02-DC2105), exhausting to stack OR-A-02-ST2105.

(k) One (1) Carborec Storage and Blending Area A, identified as CBSBA, consisting of the following:

(1) Carborec crusher feed drag conveyors, ducted to a baghouse (OR-A-05-DC1205), exhausting to stack OR-A-05-ST1205.
(2) Six (6) weigh feeders and blend #2 drag conveyors, ducted to a baghouse (OR-A-05-DC1405), exhausting to stack OR-A-05-ST1405.
(3) One (1) Carborec storage silo, ducted to a baghouse (OR-A-05-DC6070), exhausting to stack OR-A-05-ST6070.
(4) One (1) blend #2 surge bin, ducted to a baghouse (OR-A-06-DC1405), exhausting to stack OR-A-06-ST1405.
(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, ducted to a baghouse (OR-A-06-DC1205), exhausting to stack OR-A-06-ST1205.

(p) One (1) lime storage silo, identified as LSA, equipped with one (1) dust collector (OR-A-12-DC1006), exhausting to stack OR-A-12-ST1006.

CASP B

(a) Raw Material Receiving Handling and Silos B, identified as RMRHSB, approved for construction in 2010, consisting of the following:

(1) One (1) CDB1 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) baghouse (OR-B-01-DC1105), exhausting to stack OR-B-01-ST1105.
(2) One (1) CDB2 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) dust collector (OR-B-01-DC2105), exhausting to stack OR-B-01-ST2105.
(3) Five (5) dry coal storage silos, ducted to dedicated baghouses (OR-B-02-DC1070, OR-B-02-DC2070, OR-B-02-DC3070, OR-B-02-DC4070, and OR-B-02-DC5070, respectively), exhausting to stacks OR-B-02-ST1070, OR-B-02-ST2070, OR-B-02-ST3070, OR-B-02-ST4070, and OR-B-02-ST5070, respectively.
(4) Five (5) blend #1 weigh feeders and one (1) drag conveyor, ducted to one (1) baghouse (OR-B-03-DC1105), exhausting to stack OR-B-03-ST1105.
(5) Four (4) blend #1 feed hoppers and two (2) blend #1 hopper feed drag conveyors, ducted to one (1) baghouse (OR-B-04-DC1105), exhausting to stack OR-B-04-ST1105.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDB1, ducted to one (1) cyclone (OR-B-01-CY-1305) and one (1) dust collector (OR-B-01-DC1205), in series, exhausting to stack OR-B-01-ST1205.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCB1, ducted to one (1) dust collector (OR-B-02-DC1105), exhausting to stack OR-B-02-ST1105.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDB2, ducted to one (1) cyclone (OR-B-01-CY-2305) and one (1) dust collector (OR-B-01-DC2205), in series, exhausting to stack OR-B-01-ST2205.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCB2, ducted to one (1) dust collector (OR-B-02-DC2105), exhausting to stack OR-B-02-ST2105.

(k) One (1) Carborec Storage and Blending Area B, identified as CBSBB, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, ducted to a baghouse (OR-B-05-DC1205), exhausting to stack OR-B-05-DC1205.
(2) Six (6) weigh feeders and blend #2 drag conveyors, ducted to a baghouse (OR-B-05-DC1405), exhausting to stack OR-B-05-DC1405.
(3) One (1) Carborec storage silo, ducted to a baghouse (OR-B-05-DC6070), exhausting to stack OR-B-05-ST6070.
(4) One (1) blend #2 surge bin, ducted to a baghouse (OR-B-06-DC1405), exhausting to stack OR-B-06-ST1405.
(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, ducted to a baghouse (OR-B-06-DC1205), exhausting to stack OR-B-06-ST1205.

(p) One (1) lime storage silo, identified as LSB, equipped with one (1) dust collector (OR-B-12-DC1006), exhausting to stack OR-B-12-ST1006.

CASP C

(a) Raw Material Receiving Handling and Silos C, identified as RMRHSC, approved for construction in 2010, consisting of the following:

(1) One (1) CDC1 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) baghouse (OR-C-01-DC1105), exhausting to stack OR-C-01-ST1105.
(2) One (1) CDC2 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) dust collector (OR-C-01-DC2105), exhausting to stack OR-C-01-ST2105.
(3) Five (5) dry coal storage silos, ducted to dedicated baghouses (OR-C-02-DC1070, OR-C-02-DC2070, OR-C-02-DC3070, OR-C-02-DC4070, and OR-C-02-DC5070, respectively), exhausting to stacks OR-C-02-ST1070, OR-C-02-ST2070, OR-C-02-ST3070, OR-C-02-ST4070, and OR-C-02-ST5070, respectively.
(4) Five (5) blend #1 weigh feeders and one (1) drag conveyor, ducted to one (1) baghouse (OR-C-03-DC1105), exhausting to stack OR-C-03-ST1105.
(5) Four (4) blend #1 feed hoppers and two (2) blend #1 hopper feed drag conveyors, ducted to one (1) baghouse (OR-C-04-DC1105), exhausting to stack OR-C-04-ST1105.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDC1, ducted to one (1) cyclone (OR-C-01-CY-1305) and one (1) dust collector (OR-C-01-DC1205), in series, exhausting to stack OR-C-01-ST1205.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCC1, ducted to one (1) dust collector (OR-C-02-DC1105), exhausting to stack OR-C-02-ST1105.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDC2, ducted to one (1) cyclone (OR-C-01-CY-2305) and one (1) dust collector (OR-C-01-DC2205), in series, exhausting to stack OR-C-01-ST2205.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCC2, ducted to one (1) dust collector (OR-C-02-DC2105), exhausting to stack OR-C-02-ST2105.

(k) One (1) Carborec Storage and Blending Area C, identified as CBSBC, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, ducted to a baghouse (OR-C-05-DC1205), exhausting to stack OR-C-05-ST1205.
(2) Six (6) weigh feeders and blend #2 drag conveyors, ducted to a baghouse (OR-C-05-DC1405), exhausting to stack OR-C-05-ST1405.
(3) One (1) Carborec storage silo, ducted to a baghouse (OR-C-05-DC6070), exhausting to stack OR-C-05-ST6070.
(4) One (1) blend #2 surge bin, ducted to a baghouse (OR-C-06-DC1405), exhausting to stack OR-C-06-ST1405.
(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, ducted to a baghouse (OR-C-06-DC1205), exhausting to stack OR-C-06-ST1205.

(p) One (1) lime storage silo, identified as LSC, equipped with one (1) dust collector (OR-C-12-DC1006), exhausting to stack OR-C-12-ST1006.

CASP D

(a) Raw Material Receiving Handling and Silos D, identified as RMRHSD, approved for construction in 2010, consisting of the following:

(1) One (1) CDD1 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) baghouse (OR-D-01-DC1105), exhausting to stack OR-D-01-ST1105.
(2) One (1) CDD2 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) dust collector (OR-D-01-DC2105), exhausting to stack OR-D-01-ST2105.
(3) Five (5) dry coal storage silos, ducted to dedicated baghouses (OR-D-02-DC1070, OR-D-02-DC2070, OR-D-02-DC3070, OR-D-02-DC4070, and OR-D-02-DC5070, respectively), exhausting to stacks OR-D-02-ST1070, OR-D-02-ST2070, OR-D-02-ST3070, OR-D-02-ST4070, and OR-D-02-ST5070, respectively.
(4) Five (5) blend #1 weigh feeders and one (1) drag conveyor, ducted to one (1) baghouse (OR-D-03-DC1105), exhausting to stack OR-D-03-ST1105.
(5) Four (4) blend #1 feed hoppers and two (2) blend #1 hopper feed drag conveyors, ducted to one (1) baghouse (OR-D-04-DC1105), exhausting to stack OR-D-04-ST1105.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDD1, ducted to one (1) cyclone (OR-D-01-CY-1305) and one (1) dust collector (OR-D-01-DC1205), in series, exhausting to stack OR-D-01-ST1205.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCD1, ducted to one (1) dust collector (OR-D-02-DC1105), exhausting to stack OR-D-02-ST1105.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDD2, ducted to one (1) cyclone (OR-D-01-CY-2305) and one (1) dust collector (OR-D-01-DC2205), in series, exhausting to stack OR-D-01-ST2205.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCD2, ducted to one (1) dust collector (OR-D-02-DC2105), exhausting to stack OR-D-02-ST2105.

(k) One (1) Carborec Storage and Blending Area D, identified as CBSBD, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, ducted to a baghouse (OR-D-05-DC1205), exhausting to stack OR-D-05-ST1205.
(2) Six (6) weigh feeders and blend #2 drag conveyors, ducted to a baghouse (OR-D-05-DC1405), exhausting to stack OR-D-05-ST1405.
(3) One (1) Carborec storage silo, ducted to a baghouse (OR-D-05-DC6070), exhausting to stack OR-D-05-ST6070.
(4) One (1) blend #2 surge bin, ducted to a baghouse (OR-D-06-DC1405), exhausting to stack OR-D-06-ST1405.
(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, ducted to a baghouse (OR-D-06-DC1205), exhausting to stack OR-DA-06-ST1205.

(p) One (1) lime storage silo, identified as LSD, equipped with one (1) dust collector (OR-D-12-DC1006), exhausting to stack OR-D-12-ST1006.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.19.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10 [326 IAC 2-2]
Nonattainment New Source Review (NSR) Minor Limit PM2.5 [326 IAC 2-1.1-5]

Pursuant to 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment New Source Review), and in order to render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable to the Carbon Alloy Synthesis Plant (CASP) modifications (Significant Source Modification (SSM) No. 089-28848-00121 and Significant Permit Modification (SPM) No. 089-29236-00121), the Permittee shall comply with the following:

(a) PM, PM_{10}, and $PM_{2.5}$ emissions from the following units shall not exceed the emission limits listed in the table below:

Facilities	Stack ID	PM/ PM10/ PM2.5 (lb/hr each)
coal dryer and associated dried coal conveyors (CDA1)	OR-A-01-ST1215	1.29
coal crusher and associated crushed coal conveyors (CCA1)	OR-A-02-ST1105	0.11
coal dryer and associated dried coal conveyors (CDA2)	OR-A-01-ST2215	1.29
coal crusher and associated crushed coal conveyors (CCA2)	OR-A-02-ST2105	0.11
lime storage silo (LSA)	OR-A-12-ST1006	0.04
coal dryer and associated dried coal conveyors (CDB1)	OR-B-01-ST1215	1.29
coal crusher and associated crushed coal conveyors (CCB1)	OR-B-02-ST1105	0.11
coal dryer and associated dried coal conveyors (CDB2)	OR-B-01-ST2215	1.29
coal crusher and associated crushed coal conveyors (CCB2)	OR-B-02-ST2105	0.11
lime storage silo (LSB)	OR-B-12-ST1006	0.04
coal dryer and associated dried coal conveyors (CDC1)	OR-C-01-ST1215	1.29
coal crusher and associated crushed coal conveyors (CCC1)	OR-C-02-ST1105	0.11
coal dryer and associated dried coal conveyors (CDC2)	OR-C-01-ST2215	1.29
coal crusher and associated crushed coal conveyors (CCC2)	OR-C-02-ST2105	0.11
lime storage silo (LSC)	OR-C-12-ST1006	0.04
coal dryer and associated dried coal conveyors (CDD1)	OR-D-01-ST1215	1.29
coal crusher and associated crushed coal conveyors (CCD1)	OR-D-02-ST1105	0.11
coal dryer and associated dried coal conveyors (CDD2)	OR-D-01-ST2215	1.29
coal crusher and associated crushed coal conveyors (CCD2)	OR-D-02-ST2105	0.11
lime storage silo (LSD)	OR-D-12-ST1006	0.04
CASP A - RMRHSA		
CDA1 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-A-01-ST1105	0.05

Facilities	Stack ID	PM/ PM10/ PM2.5 (lb/hr each)
CDA2 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-A-01-ST2105	0.11
dry coal storage silo	OR-A-02-ST1070	0.03
dry coal storage silo	OR-A-02-ST2070	0.03
dry coal storage silo	OR-A-02-ST3070	0.03
dry coal storage silo	OR-A-02-ST4070	0.03
dry coal storage silo	OR-A-02-ST5070	0.03
blend #1 weigh feeders and drag conveyor	OR-A-03-ST1105	0.11
blend #1 feed hoppers and blend #1 hopper feed drag conveyors	OR-A-04-ST1105	0.03
CASP A - CBSBA		
Carborec crusher feed drag conveyors	OR-A-05-ST1205	0.11
weigh feeders and blend #2 drag conveyors	OR-A-05-ST1405	0.41
Carborec storage silo	OR-A-05-ST6070	0.04
blend #2 surge bin	OR-A-06-ST1405	0.04
blend #2 weigh feeders, blend #2 drag conveyors, blend #2 crushers, hi-intensive mixers, pug mills, densifers, billet belt conveyors, billet roller screener, and billet fines weigh feeder	OR-A-06-ST1205	0.11
CASP B - RMRHSB		
CDB1 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-B-01-ST1105	0.05
CDB2 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-B-01-ST2105	0.11
dry coal storage silo	OR-B-02-ST1070	0.03
dry coal storage silo	OR-B-02-ST2070	0.03
dry coal storage silo	OR-B-02-ST3070	0.03
dry coal storage silo	OR-B-02-ST4070	0.03
dry coal storage silo	OR-B-02-ST5070	0.03
blend #1 weigh feeders and drag conveyor	OR-B-03-ST1105	0.11
blend #1 feed hoppers and blend #1 hopper feed drag conveyors	OR-B-04-ST1105	0.03
CASP B - CBSBB		
Carborec crusher feed drag conveyors	OR-B-05-ST1205	0.11
weigh feeders and blend #2 drag conveyors	OR-B-05-ST1405	0.41
Carborec storage silo	OR-B-05-ST6070	0.04
blend #2 surge bin	OR-B-06-ST1405	0.04
blend #2 weigh feeders, blend #2 drag conveyors, blend #2 crushers, hi-intensive mixers, pug mills, densifers, billet belt conveyors, billet roller screener, and billet fines weigh feeder	OR-B-06-ST1205	0.11
CASP C - RMRHSC		
CDC1 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-C-01-ST1105	0.05
CDC2 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-C-01-ST2105	0.11

Facilities	Stack ID	PM/ PM10/ PM2.5 (lb/hr each)
dry coal storage silo	OR-C-02-ST1070	0.03
dry coal storage silo	OR-C-02-ST2070	0.03
dry coal storage silo	OR-C-02-ST3070	0.03
dry coal storage silo	OR-C-02-ST4070	0.03
dry coal storage silo	OR-C-02-ST5070	0.03
blend #1 weigh feeders and drag conveyor	OR-C-03-ST1105	0.11
blend #1 feed hoppers and blend #1 hopper feed drag conveyors	OR-C-04-ST1105	0.03
CASP C - CBSBC		
Carborec crusher feed drag conveyors	OR-C-05-ST1205	0.11
weigh feeders and blend #2 drag conveyors	OR-C-05-ST1405	0.41
Carborec storage silo	OR-C-05-ST6070	0.04
blend #2 surge bin	OR-C-06-ST1405	0.04
blend #2 weigh feeders, blend #2 drag conveyors, blend #2 crushers, hi-intensive mixers, pug mills, densifers, billet belt conveyors, billet roller screener, and billet fines weigh feeder	OR-C-06-ST1205	0.11
CASP D - RMRHSD		
CDD1 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-D-01-ST1105	0.05
CDD2 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-D-01-ST2105	0.11
dry coal storage silo	OR-D-02-ST1070	0.03
dry coal storage silo	OR-D-02-ST2070	0.03
dry coal storage silo	OR-D-02-ST3070	0.03
dry coal storage silo	OR-D-02-ST4070	0.03
dry coal storage silo	OR-D-02-ST5070	0.03
blend #1 weigh feeders and drag conveyor	OR-D-03-ST1105	0.11
blend #1 feed hoppers and blend #1 hopper feed drag conveyors	OR-D-04-ST1105	0.03
CASP D - CBSBD		
Carborec crusher feed drag conveyors	OR-D-05-ST1205	0.11
weigh feeders and blend #2 drag conveyors	OR-D-05-ST1405	0.41
Carborec storage silo	OR-D-05-ST6070	0.04
blend #2 surge bin	OR-D-06-ST1405	0.04
blend #2 weigh feeders, blend #2 drag conveyors, blend #2 crushers, hi-intensive mixers, pug mills, densifers, billet belt conveyors, billet roller screener, and billet fines weigh feeder	OR-D-06-ST1205	0.11

Compliance with these limits, in conjunction with other limits taken as part of the CASP modification (SSM 089-22848-00121 and SPM 089-29236-00121), will ensure the following:

(b) The PM and PM10 net emissions increase from the CASP modifications (SSM 089-22848-00121 and SPM 089-29236-00121) shall be less than twenty-five (25) and fifteen (15) tons, respectively, per per twelve (12) consecutive month period, with compliance

determined at the end of each month. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable to these modifications.

(c) The PM2.5 net emissions increase from the CASP modifications (SSM 089-22848-00121 and SPM 089-29236-00121) shall be less than ten (10) tons per twelve (12) consecutive month period, with compliance determined at the end of each month. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) are rendered not applicable to these modifications.

D.19.1.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10 [326 IAC 2-2]
Nonattainment New Source Review (NSR) Minor Limit PM2.5/SO2 [326 IAC 2-1.1-5]

On June 27, 2008, the U.S. EPA issued Notices of Violation (NOV) to the Permittee for alleged violations regarding excess emissions from the coke oven batteries. Therefore the Permit Shield in Section B - Permit Shield does not shield the Permittee from possible enforcement actions initiated by U.S. EPA, IDEM or citizens. Compliance with the terms of this permit does not serve as proof of compliance for the emission units or the matters addressed in the NOVs. Following resolution of this enforcement action, IDEM will reopen this permit, if necessary, to incorporate a compliance schedule or any new applicable requirements. The standard language of Section B - Permit Shield does not shield any activity on which the permit is silent.

D.19.2 Particulate Emission Limitation [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), the Permittee shall not allow or permit discharge to the atmosphere any gases which contain particulate matter in excess of 0.03 grain per dry standard cubic foot (dscf) from each of the facilities listed in this section.

D.19.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for each of the facilities and control devices listed in this section. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.19.4 Particulate Control

(a) In order for all units to comply with Conditions D.19.1 and D.19.2, each baghouse listed in this section shall be in operation and controlling particulate at all times when its associated facility/emissions unit is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.19.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) Not later than 180 days after the startup of CASP A, the Permittee shall perform PM, PM10, and PM2.5 testing of either the coal crusher and associated crushed coal conveyors, identified as CCA1, or the coal crusher and associated crushed coal conveyors, identified as CCA2, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Subsequent testing shall be conducted for the coal crusher and associated conveyors (CCA1 or CCA2) not tested in the most recent compliance demonstration.

(b) Not later than 180 days after the startup of CASP A, the Permittee shall perform PM, PM10, and PM2.5 testing of either the coal dryer and associated dried coal conveyors, identified as CDA1, or the coal dryer and associated dried coal conveyors, identified as CDA2, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Subsequent testing shall be conducted for the coal dryer and associated conveyors (CDA1 or CDA2) not tested in the most recent compliance demonstration.

(c) Not later than 180 days after the startup of CASP A, the Permittee shall perform PM, PM10, and PM2.5 testing of one (1) of the five (5) dry coal bins, identified under RMRHSA, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Until such time that all five (5) dry coal bins have been tested once, subsequent testing shall be conducted for a dry coal bin that has not yet demonstrated compliance. After such time that all five (5) dry coal bins have been tested, testing shall be conducted for the dry coal bin with the longest lapse in time since the most recent compliance demonstration.

(d) Not later than 180 days after the startup of CASP A, the Permittee shall perform PM, PM10, and PM2.5 testing of the three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, identified under CBSBA, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

(e) Not later than 180 days after the startup of CASP B, the Permittee shall perform PM testing of either the coal crusher and associated crushed coal conveyors, identified as CCB1, or the coal crusher and associated crushed coal conveyors, identified as CCA2, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Subsequent testing shall be conducted for the coal crusher and associated conveyors (CCB1 or CCB2) not tested in the most recent compliance demonstration.

(f) Not later than 180 days after the startup of CASP B, the Permittee shall perform PM, PM10, and PM2.5 testing of either the coal dryer and associated dried coal conveyors, identified as CDB1, or the coal dryer and associated dried coal conveyors, identified as CDB2, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Subsequent testing shall be conducted for the coal dryer and associated conveyors (CDB1 or CDB2) not tested in the most recent compliance demonstration.

(g) Not later than 180 days after the startup of CASP B, the Permittee shall perform PM, PM10, and PM2.5 testing of one (1) of the five (5) dry coal bins, identified under RMRHSB, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Until such time that all five (5) dry coal bins have been tested once, subsequent testing shall be conducted for a dry coal bin that has not yet demonstrated compliance. After such time that all five (5) dry coal bins have been tested, testing shall be conducted for the dry coal bin with the longest lapse in time since the most recent compliance demonstration.

(h) Not later than 180 days after the startup of CASP B, the Permittee shall perform PM, PM10, and PM2.5 testing of the three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, identified under CBSBB, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

(i) Not later than 180 days after the startup of CASP C, the Permittee shall perform PM, PM10, and PM2.5 testing of either the coal crusher and associated crushed coal conveyors, identified as CCC1, or the coal crusher and associated crushed coal conveyors, identified as CCC2, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Subsequent testing shall be conducted for the coal crusher and associated conveyors (CCC1 or CCC2) not tested in the most recent compliance demonstration.

(j) Not later than 180 days after the startup of CASP C, the Permittee shall perform PM, PM10, and PM2.5 testing of either the coal dryer and associated dried coal conveyors, identified as CDC1, or the coal dryer and associated dried coal conveyors, identified as CDC2, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Subsequent testing shall be conducted for the coal dryer and associated conveyors (CDC1 or CDC2) not tested in the most recent compliance demonstration.

(k) Not later than 180 days after the startup of CASP C, the Permittee shall perform PM, PM10, and PM2.5 testing of one (1) of the five (5) dry coal bins, identified under RMRHSC, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Until such time that all five (5) dry coal bins have been tested once, subsequent testing shall be conducted for a dry coal bin that has not yet demonstrated compliance. After such time that all five (5) dry coal bins have been tested, testing shall be conducted for the dry coal bin with the longest lapse in time since the most recent compliance demonstration.

(l) Not later than 180 days after the startup of CASP C, the Permittee shall perform PM, PM10, and PM2.5 testing of the three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, identified under CBSBC, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

(m) Not later than 180 days after the startup of CASP D, the Permittee shall perform PM, PM10, and PM2.5 testing of either the coal crusher and associated crushed coal conveyors, identified as CCD1, or the coal crusher and associated crushed coal conveyors, identified as CCD2, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Subsequent testing shall be conducted for the coal crusher and associated conveyors (CCD1 or CCD2) not tested in the most recent compliance demonstration.

(n) Not later than 180 days after the startup of CASP D, the Permittee shall perform PM, PM10, and PM2.5 testing of either the coal dryer and associated dried coal conveyors, identified as CDD1, or the coal dryer and associated dried coal conveyors, identified as CDD2, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Subsequent testing shall be conducted for the coal dryer and associated conveyors (CDD1 or CDD2) not tested in the most recent compliance demonstration.

(o) Not later than 180 days after the startup of CASP D, the Permittee shall perform PM, PM10, and PM2.5 testing of one (1) of the five (5) dry coal bins, identified under RMRHSD, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Until such time that all five (5) dry coal bins have been tested once, subsequent testing shall be conducted for a dry coal bin that has not yet demonstrated compliance. After such time that all five (5) dry coal bins have been tested, testing shall be conducted for the dry coal bin with the longest lapse in time since the most recent compliance demonstration.

(p) Not later than 180 days after the startup of CASP D, the Permittee shall perform PM, PM10, and PM2.5 testing of the three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, identified under CBSBD, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

(q) In lieu of performing the initial compliance tests for PM10 and PM2.5 in accordance with the schedules set forth in Condition D.19.5 (a) through (p), should the new or revised condensable PM test method(s) referenced in U.S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5) signed on May 8, 2008, fail to be published at the time of the required testing , the Permittee may elect to test not later than 180 days after publication of the new or revised condensable PM test method(s) referenced in U.S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5) signed on May 8, 2008. Subsequent testing for PM10 and PM2.5 shall not be effected by this condition (D.19.5(q)) and shall be performed in accordance with Condition D.19.5 (a) through (p).

(r) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.19.6 Visible Emissions Notations

(a) Visible emission notations of all the baghouse stack exhausts listed in this section shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, at least eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal missions are observed, the Permittee shall take reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal reading is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.19.7 Parametric Monitoring Notations

The Permittee shall record the pressure drop across each baghouse listed in this section, at least once per day when the associated facility/emissions unit is in operation. When for any one reading, the pressure drop across a baghouse is outside the normal range of 1.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps, shall be considered a deviation from this permit.

The instruments used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.19.8 Broken or Failed Bag Detection

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later that the completion of the processing of the material in the line or emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.19.9 Record Keeping Requirements

(a) To demonstrate the compliance status with Condition D.19.1, for each baghouse listed in this section, the Permittee shall maintain records of the manufacturer's specifications. Records shall be complete and sufficient to demonstrate the compliance status with the PM, PM10, and PM2.5 emission limits established in Condition D.19.1.

(b) To document the compliance status with Condition D.19.6, the Permittee shall maintain daily records of the visible emission notations of the stack exhaust of each baghouse

listed in this section. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (i.e. the process did not operate that day).

(c) To document the compliance status with Condition D.19.7, the Permittee shall maintain daily records of the pressure drop across each baghouse listed in this section. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (i.e. the process did not operate that day).

(d) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

Section D.20 **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]: Note: Complete Descriptions are shown in Section A.2.

CASP A

(l) One (1) billet transfer area, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-A-06-HP1125.
(2) Three (3) billet fines open belt conveyors, identified as OR-A-06-CB1130, OR-A-06-CB1140, and OR-A-06- CB 1145.
(3) One (1) billet belt conveyor, identified as OR-A-06-CB1110.
(4) One (1) billet hopper, identified as OR-A-06-HP1115.
(5) Four (4) billet belt conveyors, identified as OR-A-06-CB1120, OR-A-06-CB2120, OR-A-06-CB1126, and OR-A-06-CB2126.
(6) Two (2) billet vibratory feeders, identified as OR-A-06-VF1125 and OR-A-06-VF2125.
(7) Two (2) trolley car loading stations, collectively identified as OR-A-06-LD1128.
(8) One (1) billet hopper, identified as OR-A-06-HP1135, and five (5) belt conveyors, identified as OR-A-06-CB1150, OR-A-06-CB1160, OR-A-06-CB1170, OR-A-06-CB1180, and OR-A-06-CB1190.

(o) One (1) Finish Product Handling and Loading process, approved for construction in 2010, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-A-08-CB1020, OR-A-08-CB1030, OR-A-08-CB2020, and OR-A-08-CB2030.
(2) One (1) Cokonyx belt conveyor, identified as OR-A-08-CD1035.

CASP B

(l) One (1) billet transfer area, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-B-06-HP1125.
(2) Three (3) billet fines open belt conveyors, identified as OR-B-06- CB 1130, OR-B-06- CB 1140, and OR-B-06- CB 1145.
(3) One (1) billet belt conveyor, identified as OR-B-06-CB1110.
(4) One (1) billet hopper, identified as OR-B-06-HP1115.
(5) Four (4) billet belt conveyors, identified as OR-B-06-CB1120, OR-B-06-CB2120, OR-B-06-CB1126, and OR-B-06-CB2126.
(6) Two (2) billet vibratory feeders, identified as OR-B-06-VF1125 and OR-B-06-VF2125.
(7) Two (2) trolley car loading stations, collectively identified as OR-B-06-LD1128.
(8) One (1) billet hopper, identified as OR-B-06-HP1135, and five (5) belt conveyors, identified as OR-B-06-CB1150, OR-B-06-CB1160, OR-B-06-CB1170, OR-B-06-CB1180, and OR-B-06-CB1190.

(o) One (1) Finish Product Handling and Loading process, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-B-08-CB1020, OR-B-08-CB1030, OR-B-08-CB2020, and OR-B-08-CB2030.
(2) One (1) Cokonyx belt conveyor, identified as OR-B-08-CD1035.

CASP C

(l) One (1) billet transfer area, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-C-06-HP1125.
(2) Three (3) billet fines open belt conveyors, identified as OR-C-06- CB 1130, OR-C-06- CB 1140, and OR-C-06- CB 1145.
(3) One (1) billet belt conveyor, identified as OR-C-06-CB1110.
(4) One (1) billet hopper, identified as OR-C-06-HP1115.
(5) Four (4) billet belt conveyors, identified as OR-C-06-CB1120, OR-C-06-CB2120, OR-C-06-CB1126, and OR-C-06-CB2126.
(6) Two (2) billet vibratory feeders, identified as OR-C-06-VF1125 and OR-C-06-VF2125.
(7) Two (2) trolley car loading stations, collectively identified as OR-C-06-LD1128.
(8) One (1) billet hopper, identified as OR-C-06-HP1135, and five (5) belt conveyors, identified as OR-C-06-CB1150, OR-C-06-CB1160, OR-C-06-CB1170, OR-C-06-CB1180, and OR-C-06-CB1190.

(o) One (1) Finish Product Handling and Loading process, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-C-08-CB1020, OR-C-08-CB1030, OR-C-08-CB2020, and OR-C-08-CB2030.
(2) One (1) Cokonyx belt conveyor, identified as OR-C-08-CD1035.

CASP D

(l) One (1) billet transfer area, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-D-06-HP1125.
(2) Three (3) billet fines open belt conveyors, identified as OR-D-06- CB 1130, OR-D-06- CB 1140, and OR-D-06- CB 1145.
(3) One (1) billet belt conveyor, identified as OR-D-06-CB1110.
(4) One (1) billet hopper, identified as OR-D-06-HP1115.
(5) Four (4) billet belt conveyors, identified as OR-D-06-CB1120, OR-D-06-CB2120, OR-D-06-CB1126, and OR-D-06-CB2126.
(6) Two (2) billet vibratory feeders, identified as OR-D-06-VF1125 and OR-D-06-VF2125.
(7) Two (2) trolley car loading stations, collectively identified as OR-D-06-LD1128.
(8) One (1) billet hopper, identified as OR-D-06-HP1135, and five (5) belt conveyors, identified as OR-D-06-CB1150, OR-D-06-CB1160, OR-D-06-CB1170, OR-D-06-CB1180, and OR-D-06-CB1190.

(o) One (1) Finish Product Handling and Loading process, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-D-08-CB1020, OR-D-08-CB1030, OR-D-08-CB2020, and OR-D-08-CB2030.
(2) One (1) Cokonyx belt conveyor, identified as OR-D-08-CD1035.

CASP Coal Receiving and Handling

(a) Phase 1 CASP C and CASP D coal handling, approved for construction in 2010, consisting of the following:

(1) One (1) feed hopper and conveyor No.1 (PHS1-HC1), with emissions uncontrolled.
(2) Two (2) CASP C coal conveyors, identified as PHS1C-C1 and PHS1C-C2, with emissions uncontrolled.
(3) One (1) CASP C coal feed hopper No.2, identified as CASPC-FH2, with hopper receiving emissions uncontrolled.
(4) Two (2) CASP D coal conveyors, identified as PHS1D-C1 and PHS1D-C2, with emissions uncontrolled.
(5) One (1) CASP D coal feed hopper No.2, identified as CASPD-FH2, with hopper receiving emissions uncontrolled.

(b) Phase 2 CASP coal handling, approved for construction in 2010, consisting of the following:

(1) Two (2) CASP coal conveyors, identified as CASP-C1 and CASP-C2, with emissions uncontrolled.
(2) One (1) CASP rotary stacker CASP-RS1, with emissions uncontrolled.
(3) Four (4) CASP coal conveyor feed hoppers, identified as CASPA-FH1, CASPB-FH1, CASPC-FH1, and CASPD-FH1, with emissions uncontrolled.
(4) Two (2) CASP A coal conveyors, identified as CASPA-C1 and CASPA-C2, with emissions uncontrolled.
(5) One (1) CASP A coal feed hopper No.2, identified as CASPA-FH2, with hopper receiving emissions uncontrolled.
(6) Two (2) CASP B coal conveyors, identified as CASPB-C1 and CASPB-C2, with emissions uncontrolled.
(7) One (1) CASP B coal feed hopper No.2, identified as CASPB-FH2, with hopper receiving emissions uncontrolled.
(8) Two (2) CASP C coal conveyors, identified as CASPC-C1 and CASPC-C2, with emissions uncontrolled.
(9) Two (2) CASP D coal conveyors, identified as CASPD-C1 and CASPD-C2, with emissions uncontrolled.

(c) Storage Piles

(1) One (1) PHS1 intermediate coal storage pile No. 1.
(2) Four (4) PHS1 coal storage piles.
(3) One (1) PHS1 intermediate coal storage pile No. 2.
(4) Four (4) CASP coal storage piles.

CASP Cokonyx Loadout

(a) Two (2) single deck vibratory screener feeders for CASP A, identified as CASPA-VF1 and CASPA-VF2, with emissions uncontrolled.
(b) Two (2) single deck vibratory screener feeders for CASP B, identified as CASPB-VF1 and CASPB-VF2, with emissions uncontrolled.
(c) Two (2) single deck vibratory screener feeders for CASP C, identified as CASPC-VF1 and CASPC-VF2, with emissions uncontrolled.
(d) Two (2) single deck vibratory screener feeders for CASP D, identified as CASPD-VF1 and CASPD-VF2, with emissions uncontrolled.
(e) Two (2) emergency product by-pass bunkers for CASP A, identified as CASPA-EB1 and CASPA-EB2, with emissions uncontrolled.

(f) Two (2) emergency product by-pass bunkers for CASP B, identified as CASPB-EB1 and CASPB-EB2, with emissions uncontrolled.
(g) Two (2) emergency product by-pass bunkers for CASP C, identified as CASPC-EB1 and CASPC-EB2, with emissions uncontrolled.
(h) Two (2) emergency product by-pass bunkers for CASP D, identified as CASPD-EB1 and CASPD-EB2, with emissions uncontrolled.
(i) Two (2) Cokonyx loadout conveyors for CASP A, identified as CKNXC-A1 and CKNXC-A2, with emissions uncontrolled.
(j) Two (2) Cokonyx loadout conveyors for CASP B, identified as CKNXC-B1 and CKNXC-B2, with emissions uncontrolled.
(k) Two (2) Cokonyx loadout conveyors for CASP C, identified as CKNXC-C1 and CKNXC-C2, with emissions uncontrolled.
(l) Two (2) Cokonyx loadout conveyors for CASP D, identified as CKNXC-D1 and CKNXC-D2, with emissions uncontrolled.
(m) One (1) C/D Cokonyx conveyor, identified as CKNXC-C/D, with emissions uncontrolled.
(n) One (1) A/B Cokonyx conveyor, identified as CKNXC-A/B, with emissions uncontrolled.
(o) Two (2) C/D Cokonyx surge bins, collectively identified as CKNXBin-C/D1, with emissions uncontrolled.
(p) Two (2) A/B Cokonyx surge bins, collectively identified as CKNXBin-A/B1, with emissions uncontrolled.
(q) Storage Piles

(1) CASP A/B Cokonyx Emergency Storage Pile.
(2) CASP C/D Cokonyx Emergency Storage Pile.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.20.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10 [326 IAC 2-2]
Nonattainment New Source Review (NSR) Minor Limit PM2.5 [326 IAC 2-1.1-5]

Pursuant to 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment New Source Review), and in order to render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable to the Carbon Alloy Synthesis Plant (CASP) modifications (Significant Source Modification (SSM) No. 089-28848-00121 and Significant Permit Modification (SPM) No. 089-29236-00121), the Permittee shall comply with the following:

(a) The input of coal to the following facilities shall be less than the limited amount per twelve (12) consecutive month period with compliance determined at the end of each month. The PM emissions shall not exceed 1.68 pounds per kton of coal input, the PM_{10} emissions shall not exceed 0.79 pound per kton of coal input, and the $PM_{2.5}$ emissions shall not exceed 0.12 pound per kton of coal input.

Facility Description	Facility ID (if Applicable)	Limited Input (tons per 12 month period)
Phase 1 CASP C/D Coal Feed Path		
PHS1 intermediate storage pile #1	n/a	750,000
phase 1 coal piles (4 piles)	n/a	750,000 (combined)
CASP C/D hopper feeder & conveyor	PHS1-HC1	750,000
PHS1 intermediate storage pile #2	n/a	750,000

Phase 1 CASP C Coal Feed Path		
CASP C coal feed conveyors	PHS1C-C1, PHS1C-C2	375,000 (each)
Phase 1 CASP D Coal Feed Path		
CASP D coal conveyors	PHS1D-C1, PHS1D-C2	375,000 (each)
Phase 2 CASP A/B/C/D Coal Feed Path		
CASP coal conveyors and CASP rotary stacker	CASP-C1, CASP-C2, CASP-RS1	1,500,000 (each)
four (4) CASP coal storage piles	n/a	1,500,000
Phase 2 CASP C Coal Feed Path		
CASP C - coal feed hopper No.1 and coal conveyors	CASPC-FH1 CASPC-C1, CASPC-C2	375,000 (each)
Phase 2 CASP D Coal Feed Path		
CASP D coal feed hopper No.1 and coal conveyors	CASPD-FH1, CASPD-C1, CASPD-C2	375,000 (each)

(1) The amount of coal handled by the Phase 1 CASP C/D Coal Feed Path facilities (PHS1 intermediate storage pile #1, phase 1 coal piles, PHS1-HC1, PHS1 intermediate storage pile #2) and the Phase 2 CASP A/B/C/D Coal Feed Path facilities (CASP-C1, CASP-C2, CASP-RS1, and CASP coal storage piles) shall be less than 1,500,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(2) The amount of coal handled by the Phase 1 CASP C Coal Feed Path facilities (PHS1C-C1 and PHS1C-C2) and the Phase 2 CASP C Coal Feed Path facilities (CASPC-FH1, CASPC-C1, and CASPC-C2) shall be less than 375,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(3) The amount of coal handled by the Phase 1 CASP D Coal Feed Path facilities (PHS1D-C1 and PHS1D-C2)and the Phase 2 CASP D Coal Feed Path facilities (CASPD-FH1, CASPD-C1, and CASPD-C2) shall be less than 375,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) The input of coal to the following facilities shall be less than the limited amount per twelve (12) consecutive month period with compliance determined at the end of each month. The PM emissions shall not exceed 1.68 pounds per kton of coal input, the PM_{10} emissions shall not exceed 0.79 pound per kton of coal input, and the $PM_{2.5}$ emissions shall not exceed 0.12 pound per kton of coal input.

Facility Description	Facility ID	Limited Input (tons per 12 month period)
CASP A - feed hopper, Conv. #1, Conv. #2, and coal feed hopper	CASPA-FH1, CASPA-C1 CASPA-C2, CASPA-FH2	375,000 (each)
CASP B - feed hopper, Conv. #1, Conv. #2, and coal feed hopper	CASPB-FH1, CASPB-C1 CASPB-C2, CASPB-FH2	375,000 (each)
CASP C coal feed hopper No.2	CASPC-FH2	375,000

CASP D coal feed hopper No.2	CASPD-FH2	375,000

(c) The input of billets or billet fines to the following facilities shall be less than the limited amount per twelve (12) consecutive month period with compliance determined at the end of each month. The PM emissions shall not exceed 0.41 pound per kton of material input, the PM_{10} emissions shall not exceed 0.19 pound per kton of material input, and the $PM_{2.5}$ emissions shall not exceed 0.03 pound per kton of material input.

Facility Description	Facility ID (if Applicable)	Limited Input (tons per 12 month period)
CASP A - Billet Transfer Area		
billet fines hopper, and three (3) billet fine conveyors	OR-A-06-HP1125, OR-A-06-CB1130, OR-A-06-CB1140, OR-A-06-CB1145	50,000 (each)
billet drag conveyer and billet hopper	OR-A-06-CD1110, OR-A-06-HP1115,	375,000 (each)
billet belt conveyors	OR-A-06-CB1120, OR-A-06-CB1126	375,000 (combined)
billet belt conveyors	OR-A-06-CB2120, OR-A-06-CB2126	375,000 (combined)
billet vibratory feeders	OR-A-06-VF1125, OR-A-06-VF2126	375,000 (combined)
two (2) trolley loading pans	OR-A-06-LD1128	375,000 (combined)
two (2) trolley cars	OR-A-06-LD1128	375,000 (combined)
billet hopper and five (5) billet drag conveyors	OR-A-06-HP1135, OR-A-06-CD1150, OR-A-06-CD1160, OR-A-06-CD1170, OR-A-06-CD1180, OR-A-06-CD1190	375,000 (each)
CASP B - Billet Transfer Area		
billet fines hopper, and three (3) billet fine conveyors	OR-B-06-HP1125, OR-B-06-CB1130, OR-B-06-CB1140, OR-B-06-CB1145	50,000 (each)
billet drag conveyer and billet hopper	OR-B-06-CD1110, OR-B-06-HP1115,	375,000 (each)
billet belt conveyors	OR-B-06-CB1120, OR-B-06-CB1126	375,000 (combined)
billet belt conveyors	OR-B-06-CB2120, OR-B-06-CB2126	375,000 (combined)
billet vibratory feeders	OR-B-06-VF1125, OR-B-06-VF2126	375,000 (combined)
two (2) trolley loading pans	OR-B-06-LD1128	375,000 (combined)
two (2) trolley cars	OR-B-06-LD1128	375,000 (combined)
billet hopper and five (5) billet drag conveyors	OR-B-06-HP1135, OR-B-06-CD1150, OR-B-06-CD1160, OR-B-06-CD1170, OR-B-06-CD1180, OR-B-06-CD1190	375,000 (each)
CASP C - Billet Transfer Area		
billet fines hopper, and three (3) billet fine conveyors	OR-C-06-HP1125, OR-C-06-CB1130, OR-C-06-CB1140, OR-C-06-CB1145	50,000 (each)
billet drag conveyer and billet hopper	OR-C-06-CD1110, OR-C-06-HP1115,	375,000 (each)

Facility Description	Facility ID (if Applicable)	Limited Input (tons per 12 month period)
billet belt conveyors	OR-C-06-CB1120, OR-C-06-CB1126	375,000 (combined)
billet belt conveyors	OR-C-06-CB2120, OR-C-06-CB2126	375,000 (combined)
billet vibratory feeders	OR-C-06-VF1125, OR-C-06-VF2126	375,000 (combined)
two (2) trolley loading pans	OR-C-06-LD1128	375,000 (combined)
two (2) trolley cars	OR-C-06-LD1128	375,000 (combined)
billet hopper and five (5) billet drag conveyors	OR-C-06-HP1135, OR-C-06-CD1150, OR-C-06-CD1160, OR-C-06-CD1170, OR-C-06-CD1180, OR-C-06-CD1190	375,000 (each)
CASP D - Billet Transfer Area		
billet fines hopper, and three (3) billet fine conveyors	OR-D-06-HP1125, OR-D-06-CB1130, OR-D-06-CB1140, OR-D-06-CB1145	50,000 (each)
billet drag conveyer and billet hopper	OR-D-06-CD1110, OR-D-06-HP1115,	375,000 (each)
billet belt conveyors	OR-D-06-CB1120, OR-D-06-CB1126	375,000 (combined)
billet belt conveyors	OR-D-06-CB2120, OR-D-06-CB2126	375,000 (combined)
billet vibratory feeders	OR-D-06-VF1125, OR-D-06-VF2126	375,000 (combined)
two (2) trolley loading pans	OR-D-06-LD1128	375,000 (combined)
two (2) trolley cars	OR-D-06-LD1128	375,000 (combined)
billet hopper and five (5) billet drag conveyors	OR-D-06-HP1135, OR-D-06-CD1150, OR-D-06-CD1160, OR-D-06-CD1170, OR-D-06-CD1180, OR-D-06-CD1190	375,000 (each)

(d) The input of Cokonyx to the following facilities shall be less than the limited amount per twelve (12) consecutive month period with compliance determined at the end of each month. The PM emissions shall not exceed 1.90 pounds per kton of Cokonyx input, the PM_{10} emissions shall not exceed 0.90 pound per kton of Cokonyx input, and the $PM_{2.5}$ emissions shall not exceed 0.14 pound per kton of Cokonyx input.

Facility Description	Facility ID (if Applicable)	Limited Input (tons per 12 month period)
CASP A - Finish Product Handling & Loading Process		
Cokonyx belt conveyors	OR-A-08-CB1020, OR-A-08-CB1030	300,000 (combined)
Cokonyx belt conveyors	OR-A-08-CB2020, OR-A-08-CB2030	300,000 (combined)
Cokonyx belt conveyor	OR-A-08-CB1035	300,000
CASP B - Finish Product Handling & Loading Process		
Cokonyx belt conveyors	OR-B-08-CB1020, OR-B-08-CB1030	300,000 (combined)

Facility Description	Facility ID (if Applicable)	Limited Input (tons per 12 month period)
Cokonyx belt conveyors	OR-B-08-CB2020, OR-B-08-CB2030	300,000 (combined)
Cokonyx belt conveyor	OR-B-08-CB1035	300,000
CASP C - Finish Product Handling & Loading Process		
Cokonyx belt conveyors	OR-C-08-CB1020, OR-C-08-CB1030	300,000 (combined)
Cokonyx belt conveyors	OR-C-08-CB2020, OR-C-08-CB2030	300,000 (combined)
Cokonyx belt conveyor	OR-C-08-CB1035	300,000
CASP D - Finish Product Handling & Loading Process		
Cokonyx belt conveyors	OR-D-08-CB1020, OR-D-08-CB1030	300,000 (combined)
Cokonyx belt conveyors	OR-D-08-CB2020, OR-D-08-CB2030	300,000 (combined)
Cokonyx belt conveyor	OR-D-08-CB1035	300,000

(e) The input of Cokonyx to the following facilities shall be less than the limited amount per twelve (12) consecutive month period with compliance determined at the end of each month. The PM emissions shall not exceed 15.99 pounds per kton of Cokonyx input, the PM_{10} emissions shall not exceed 7.56 pounds per kton of Cokonyx input, and the $PM_{2.5}$ emissions shall not exceed 1.15 pounds per kton of Cokonyx input.

Facility Description	Facility ID (if Applicable)	Limited Input (tons per 12 month period)
CASP A - two (2) vibratory feeders	CASPA-VF1, CASPA-VF2	300,000 (combined)
CASP A - two (2) emergency bypass bunkers	CASPA-EB1, CASPA-EB2	300,000 (combined)
CASP A - Cokonyx conveyors	CKNXC-A1, CKNXC-A2	300,000 (combined)
CASP B - two (2) vibratory feeders	CASPB-VF1, CASPB-VF2	300,000 (combined)
CASP B - two (2) emergency bypass bunkers	CASPB-EB1, CASPA-EB2	300,000 (combined)
CASP A/B Emergency Storage Pile	n/a	600,000
CASP B - Cokonyx conveyors	CKNXC-B1, CKNXC-B2	300,000 (combined)
CASP A & B - Cokonyx conveyor	CKNXC-A/B	600,000
CASP A & B - Cokonyx storage bins	CKNXBin-A/B	600,000
CASP C - two (2) vibratory feeders	CASPC-VF1, CASPC-VF2	300,000 (combined)
CASP C - two (2) emergency bypass bunkers	CASPC-EB1, CASPC-EB2	300,000 (combined)
CASP C - Cokonyx conveyors	CKNXC-C1, CKNXC-C2	300,000 (combined)
CASP D - two (2) vibratory feeders	CASPD-VF1, CASPD-VF2	300,000 (combined)

Facility Description	Facility ID (if Applicable)	Limited Input (tons per 12 month period)
CASP D - two (2) emergency bypass bunkers	CASPD-EB1, CASPD-EB2	300,000 (combined)
CASP C/D Emergency Storage Pile	n/a	600,000
CASP D - Cokonyx conveyors	CKNXC-D1, CKNXC-D2	300,000 (combined)
CASP C & D - Cokonyx conveyor	CKNXC-C/D	600,000
CASP C & D - Cokonyx storage bins	CKNXBin-C/D	600,000
Cokonyx loadout to railcar	CKNXLoadout	1,200,000

Compliance with these limits, in conjunction with other limits taken as part of the CASP modification (SSM 089-22848-00121 and SPM 089-29236-00121), will ensure the following:

(f) The PM and PM10 net emissions increase from the CASP modifications (SSM 089-22848-00121 and SPM 089-29236-00121) shall be less than twenty-five (25) and fifteen (15) tons, respectively, per twelve (12) consecutive month period, with compliance determined at the end of each month. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable to these modifications.

(g) The PM2.5 net emissions increase from the CASP modifications (SSM 089-22848-00121 and SPM 089-29236-00121) shall be less than ten (10) tons per twelve (12) consecutive month period, with compliance determined at the end of each month. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) are rendered not applicable to these modifications.

D.20.1.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10 [326 IAC 2-2]
Nonattainment New Source Review (NSR) Minor Limit PM2.5/SO2 [326 IAC 2-1.1-5]

On June 27, 2008, the U.S. EPA issued Notices of Violation (NOV) to the Permittee for alleged violations regarding excess emissions from the coke oven batteries. Therefore the Permit Shield in Section B - Permit Shield does not shield the Permittee from possible enforcement actions initiated by U.S. EPA, IDEM or citizens. Compliance with the terms of this permit does not serve as proof of compliance for the emission units or the matters addressed in the NOVs. Following resolution of this enforcement action, IDEM will reopen this permit, if necessary, to incorporate a compliance schedule or any new applicable requirements. The standard language of Section B - Permit Shield does not shield any activity on which the permit is silent.

D.20.2 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3]

(a) Pursuant to 326 IAC 6-4-2:

(1) The billet transfer areas, finish product handling and loading processes, coal receiving and handling facilities, and cokonyx loadout facilities, roads and storage piles, shall be in violation of this rule (326 IAC 6-4) if any of the following criteria are violated:

(A) A source or combination of sources which cause to exist fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations as determined by the following formula:

$$P = \frac{100\ (R) - U)}{U}$$

Where

P = Percentage increase
R = Number of particles of fugitive dust measured at downward receptor site
U = Number of particles of fugitive dust measured at upwind or background site

(B) The fugitive dust is comprised of fifty percent (50%) or more respirable dust, then the percent increase of dust concentration in subdivision (1) of this section shall be modified as follows:

$$PR = (1.5 \pm N)\ P$$

Where
N = Fraction of fugitive dust that is respirable dust;
PR = allowable percentage increase in dust concentration above background; and
P = no value greater than sixty-seven percent (67%).

(C) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.

(D) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subdivisions (1), (2) or (3) of this section. 326 IAC 6-4-2(4) is not federally enforceable.

(2) Pursuant to 326 IAC 6-4-6(6) (Exceptions), fugitive dust from a source caused by adverse meteorological conditions will be considered an exception to this rule (326 IAC 6-4) and therefore not in violation.

(b) Pursuant to 326 IAC 6.8-10-3 Lake County Fugitive Particulate Matter Emissions Limitations, fugitive emissions from the billet transfer areas, finish product handling and loading processes, coal receiving and handling facilities, and cokonyx loadout facilities, roads and storage piles, shall comply with the emission limitations in Section C.5 - Fugitive Dust Emissions.

D.20.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for each of the facilities and control devices listed in this section. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.20.4 Particulate Matter Control

Pursuant to 326 IAC 6.8-10-3 (Lake County Fugitive Particulate Matter Control Requirements), opacity from the activities shall be determined as follows:

(a) Paved Roads and Parking Lots
The average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass. The three (3) opacity readings for each vehicle pass shall be taken as follows:

(1) The first will be taken at the time of emission generation.

(2) The second will be taken five (5) seconds later.

(3) The third will be taken five (5) seconds later or ten (10) seconds after the first.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.

(b) Unpaved Roads and Parking Lots
The fugitive particulate emissions from unpaved roads shall be controlled by the implementation of a work program and work practice under the fugitive dust control plan.

(c) Batch Transfer
The average instantaneous opacity shall consist of the average of three (3) opacity readings taken five (5) seconds, ten (10) seconds, and fifteen (15) seconds after the end of one (1) batch loading or unloading operation. The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume.

(d) Continuous Transfer of Material Unto and Out of Storage Piles
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9. The opacity readings shall be taken at least four (4) feet from the point of origin.

(e) Wind Erosion from Storage Piles and Exposed Areas
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9, except that the opacity shall be observed at approximately four (4) feet from the surface at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. The limitations may not apply during periods when application of fugitive particulate control measures is either ineffective or unreasonable due to sustained very high wind speeds. During such periods, the company must continue to implement all reasonable fugitive particulate control measures and maintain records documenting the application of measures and the basis for a claim that meeting the opacity limitation was not reasonable given prevailing wind conditions.

(f) Material Transported by Truck or Rail
Compliance with this limitation shall be determined by 40 CFR 60, Appendix A, Method 22, except that the observation shall be taken at approximately right angles to the prevailing wind from the leeward side of the truck or railroad car. Material transported by truck or rail that is enclosed and covered shall be considered in compliance with the in plant transportation requirement.

(g) Material Transported by Front End Loader or Skip Hoist
Compliance with this limitation shall be determined by the average of three (3) opacity readings taken at five (5) second intervals. The three (3) opacity readings shall be taken as follows:

(1) The first will be taken at the time of emission generation.

(2) The second will be taken five (5) seconds later.

(3) The third will be taken five (5) seconds later or ten (10) seconds after the first.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand at least fifteen (15) feet from the plume approximately and at right angles to

the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.

(h) Material Processing Limitations

(1) Compliance with stack opacity limitations from material processing facilities shall be determined using 40 CFR 60, Appendix A, Method 9.

(2) Compliance with the opacity limitations for fugitive particulate emissions from material processing equipment, except from a crusher at which a capture system is not used, shall be determined using 40 CFR 60, Appendix A, Method 9.

(3) Compliance with the opacity limitations for fugitive particulate emissions from a crusher at which a capture system is not used, shall be determined using 40 CFR 60, Appendix A, Method 9.

(4) Compliance with the opacity limitations for fugitive particulate emissions from a building enclosing all or part of the material processing equipment, except from a vent in the building shall be determined using 40 CFR 60, Appendix A, Method 22.

(5) Compliance with the opacity limitations for fugitive particulate emissions from building vents shall be determined using 40 CFR 60, Appendix A, Method 5 or 17 or 40 CFR 60, Appendix A, Method 9.

(i) Dust Handling Equipment
Compliance with this standard shall be determined by 40 CFR 60, Appendix A, Method 9.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.20.5 Record Keeping Requirements

(a) To document the compliance status with Condition D.20.1(a), the Permittee shall maintain records of the coal input to each of the facilities listed in Condition D.20.1(a)(1).

(b) To document the compliance status with Condition D.20.1(a)(1), the Permittee shall maintain records of the coal handled by the Phase 1 CASP C/D Coal Feed Path and the Phase 2 CASP A/B/C/D Coal Feed Path.

(c) To document the compliance status with Condition D.20.1(a)(2), the Permittee shall maintain records of the coal handled by the Phase 1 CASP C Coal Feed Path and the Phase 2 CASP C Coal Feed Path.

(d) To document the compliance status with Condition D.20.1(a)(3), the Permittee shall maintain records of the coal handled by the Phase 1 CASP D Coal Feed Path and the Phase 2 CASP D Coal Feed Path.

(e) To document the compliance status with Condition D.20.1(b), the Permittee shall maintain records of the coal input to each of the facilities listed in Condition D.20.1(b).

(f) To document the compliance status with Condition D.20.1(c), the Permittee shall maintain records of the billet and billet fines input to each of the facilities listed in Condition D.20.1(c).

(g) To document the compliance status with Condition D.20.1(d) and (e), the Permittee shall maintain records of the Cokonyx input to each of the facilities listed in Condition D.20.1(d) and (e).

(h) Pursuant to 326 IAC 6.8-10-4(4) (Lake County Fugitive Particulate Matter Control Requirements):

(1) The source shall keep the following documentation to show compliance with each of its control measures and control practices:

(A) A map or diagram showing the location of all emission sources controlled, including the location, identification, length, and width of roadways.

(B) For each application of water or chemical solution to roadways, the following shall be recorded:

(i) The name and location of the roadway controlled

(ii) Application rate
(iii) Time of each application
(iv) Width of each application
(v) Identification of each method of application
(vi) Total quantity of water or chemical used for each application
(vii) For each application of chemical solution, the concentration and identity of the chemical
(viii) The material data safety sheets for each chemical

(C) For application of physical or chemical control agents not covered by clause (B), the following:

(i) The name of the agent
(ii) Location of application
(iii) Application rate
(iv) Total quantity of agent used
(v) If diluted, percent of concentration
(vi) The material data safety sheets for each chemical

(D) A log recording incidents when control measures were not used and a statement of explanation.

(E) Copies of all records required by this section shall be submitted to the department within twenty (20) working days of a written request by the department.

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.20.6 Reporting Requirements

(a) A quarterly report and a quarterly summary of the information to document the compliance status with Condition D.20.1 shall be submitted not later than thirty (30) days after the end of the quarter being reported.

(b) Pursuant to 326 IAC 6.8-10-4(4)(G) (Lake County Fugitive Particulate Matter Control Requirements), a quarterly report shall be submitted to the department stating the following:

(1) The dates any required control measures were not implemented

(2) A listing of those control measures

(3) The reasons that the control measures were not implemented

(4) Any corrective action taken

(c) These reports shall be submitted not later than thirty (30) calendar days following the end of each calendar quarter. Section C – General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition. The reports submitted by the Permittee do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(34).

Section D.21 **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]: Note: Complete Descriptions are shown in Section A.2 and Section A.3.

CASP A

(q) Two (2) diesel-fired emergency generators, identified as EGA1 and EGA2, approved for construction in 2010, each with a maximum rated output of 1650 kW.

(r) One (1) natural gas-fired emergency generator, identified as EGA3, approved for construction in 2010, with a maximum rated output of 450 kW.

CASP B

(q) Two (2) diesel-fired emergency generators, identified as EGB1 and EGB2, approved for construction in 2010, each with a maximum rated output of 1650 kW.

(r) One (1) natural gas-fired emergency generator, identified as EGB3, approved for construction in 2010, with a maximum rated output of 450 kW.

CASP C

(q) Two (2) diesel-fired emergency generators, identified as EGC1 and EGC2, approved for construction in 2010, each with a maximum rated output of 1650 kW.

(r) One (1) natural gas-fired emergency generator, identified as EGC3, approved for construction in 2010, with a maximum rated output of 450 kW.

CASP D

(q) Two (2) diesel-fired emergency generators, identified as EGD1 and EGD2, approved for construction in 2010, each with a maximum rated output of 1650 kW

(r) One (1) natural gas-fired emergency generator, identified as EGD3, approved for construction in 2010, with a maximum rated output of 450 kW.

(d) Specifically regulated insignificant activities (Carbon Alloy Synthesis Plants):

CASP Module A

(1) One (1) lubricating oil storage tank, identified as STO3 A, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 A, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT A1 and PFRCT A2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPA, approved for construction in 2010, with a maximum rated output of 315 Hp.

(5) One (1) coal tar storage tank, identified as STO1 A, approved for construction in 2010, with a storage capacity of 10,000 gallons.

CASP Module B

(1) One (1) lubricating oil storage tank, identified as STO3 B, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 B, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT B1 and PFRCT B2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPB, approved for construction in 2010, with a maximum rated output of 315 Hp.

(5) Two (2) coal tar storage tanks, identified as STO1 B and STO2 B, approved for construction in 2010, each with a storage capacity of 10,000 gallons.

CASP Module C

(1) One (1) lubricating oil storage tank, identified as STO3 C, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 C, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT C and PFRCT C2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPC, approved for construction in 2010, with a maximum rated output of 315 Hp.

(5) Two (2) coal tar storage tanks, identified as STO1 C and STO2 C, approved for construction in 2010, each with a storage capacity of 10,000 gallons.

CASP Module D

(1) One (1) lubricating oil storage tank, identified as STO3 D, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 D, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT D1 and PFRCT D2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPD, approved for construction in 2010, with a maximum rated output of 315 Hp.

(5) One (1) coal tar storage tank, identified as STO1 D, approved for construction in 2010, with a storage capacity of 10,000 gallons.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.21.1 Particulate Emission Limitation [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), the Permittee shall not allow or permit discharge to the atmosphere any gases which contain particulate matter in excess of 0.03 grain per dry standard cubic foot (dscf) from each engine and cooling tower system listed in this section.

D.21.2 Volatile Organic Liquid Storage Vessels [326 IAC 8-9-1]

(a) Pursuant to 326 IAC 8-9-1 (a) and (b) (Volatile Organic Liquid Storage Vessels), on and after October 1, 1995, stationary vessels used to store volatile organic liquids (VOL), that are located in Lake County with a capacity of less than thirty nine thousand (39,000) gallons are subject to the reporting and record keeping requirements of this rule. The VOL storage vessels are exempted from all other provisions of this rule.

(b) Pursuant to 326 IAC 8-9-6 (a) and (b), the Permittee of each Volatile Organic Liquid Storage vessel to which 326 IAC 8-9-1 applies shall maintain the following records for the life of the vessel and submit a report to IDEM, OAQ containing the following for each vessel:

(1) The vessel identification number,

(2) The vessel dimensions, and

(3) The vessel capacity.

SECTION E.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: The coal pulverization and air preheater system, located in the East Building consists of the following:

(a) One (1) coal pulverization equipment train, identified as SS-1 that consists of a pulverizer with a maximum capacity of 90 tons per hour; a preheater with a maximum heat input capacity of 37.3 MMBtu per hour, and dual process separation cyclone, constructed in 1993, and exhausting to one baghouse with three modules (three stacks) 1A, 1B and 1C.

(b) One (1) coal pulverization equipment train, identified as SS-2 that consists of a pulverizer with a maximum capacity of 90 tons per hour; a preheater with a maximum heat input capacity of 37.3 MMBtu per hour, and dual process separation cyclone, constructed in 1993, and exhausting to one baghouse with three modules (three stacks) 2A, 2B and 2C.

(c) One (1) coal pulverization equipment train, identified as SS-3 that consists of a pulverizer with a maximum capacity of 90 tons per hour; a preheater with a maximum heat input capacity of 37.3 MMBtu per hour, and dual process separation cyclone, constructed in 1993, and exhausting to one baghouse with three modules (three stacks) 3A, 3B and 3C.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

E.1.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart Y.

E.1.2 NSPS Coal Preparation Plant [326 IAC 12-1][40 CFR 60 Subpart Y]

Pursuant to 40 CFR 60.252 (a) and (c):

(a) The Permittee shall not cause to be discharged into the atmosphere from any thermal dryer (preheater) gases which contain particulate matter in excess of 0.031 gr/dscf.

(b) The Permittee shall not cause to be discharged into the atmosphere from any coal processing equipment gases which exhibit twenty percent (20%) opacity or greater.

E.1.3 PSD Minor Limit (NO_X) [326 IAC 2-2]

Pursuant to CP (45) 1895 issued October 26, 1990, the NO_X emissions from the pulverized coal preheaters and railcar heater (Section E.3) shall be limited to 37 tons per 12 consecutive month period. Pursuant to CP(45) 1895, the natural gas usage in the three (3) preheaters shall be limited to less than 549 million cubic feet per 12 consecutive month period with compliance demonstrated at the end of each month. The natural gas usage in the three (3) preheaters shall be limited to less than 183 million cubic feet per month. Compliance with this limit restricts the potential to emit for NO_X to less than 37 tons per year for the three (3) preheaters and makes the provisions of 326 IAC 2-2 Prevention of Significant Deterioration (PSD), not applicable.

E.1.4 PM and PM_{10} Minor Limits [326 IAC 2-2][326 IAC 2-1.1-5]

(a) The particulate matter (PM) from SS-1 stacks 1A, 1B and 1C; SS-2 stacks 2A, 2B and 2C; and SS-3 stacks 3A, 3B and 3C shall each not exceed 0.2 pounds per hour.

(b) The particulate matter less than 10 microns (PM_{10}) from SS-1 stacks 1A, 1B and 1C; SS-2 stacks 2A, 2B and 2C; and SS-3 stacks 3A, 3B and 3C shall each not exceed 0.12 pounds per hour.

(c) Compliance with the limitations in conditions E.1.4(a), E.2.3(a) and E.4.3(a) combined limits PM to less than 25 tons per year and makes 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.

(d) Compliance with the limitations in conditions E.1.4(b), E.2.3(b) and E.4.3(b) combined limits PM_{10} to less than 15 tons per year and makes 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.

E.1.5 Particulate Limitations [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a) (Particulate Matter Limitations for Lake County), the particulate matter from the coal pulverization equipment trains 1, 2 and 3 shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

E.1.6 Preventive Maintenance Plan

A Preventive Maintenance Plan is required for the pulverizers, preheaters, dual process separation cyclones and associated baghouses. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

E.1.7 Testing Requirements

Not later than 36 months after issuance of Part 70 Operating Permit No. T089-7171-00169 (issued on July 19, 2006) and in order to comply with conditions E.1.2, E.1.4, and E.1.5 the Permittee shall perform PM/ PM_{10} stack tests on the three pulverization equipment train SS-1 baghouse stacks 1A, 1B and 1C, the three pulverization equipment train SS-2 baghouse stacks 2A, 2B and 2C, or the three pulverization equipment train SS-3, baghouse stacks 3A, 3B and 3C utilizing a testing method approved by the commissioner. PM_{10} includes filterable and condensable PM_{10}. These tests shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. The second five year cycle of tests shall be performed on the three pulverization equipment train baghouse SS-1 stacks 1A, 1B and 1C, the three pulverization equipment train SS-2 baghouse stacks 2A, 2B and 2C or the three pulverization equipment train SS-3 baghouse stacks 3A, 3B and 3C not previously tested. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation wtih regard to the performance testing required by this condition. The third year cycle of tests shall be performed on the three pulverization equipment train baghouse SS-1 stacks 1A, 1B and 1C, the three pulverization equipment train SS-2 baghouse stacks 2A, 2B and 2C or the three pulverization equipment train SS-3 baghouse stacks 3A, 3B and 3C not previously tested. Then the five year cycle of test begins on the first three pulverization equipment train baghouse stacks tested.

E.1.8 NSPS Coal Preparation Plant [40 CFR 60.245]

Pursuant to 40 CFR 60.254, the Permittee shall demonstrate compliance as follows:

(a) In conducting the performance tests required in 40 CFR 60.8, the Permittee shall use as reference methods and procedures, the test methods in 40 CFR 60 Appendix A or other methods and procedures as specified in 40 CFR 60.254, except as provided in 40 CFR 60.8(b).

(b) The Permittee shall determine compliance with the particulate matter standards in condition E.1.2 as follows:

(1) For condition E.1.2(a), Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 30 dscf. Sampling shall begin no less than 30 minutes after start-up and shall terminate before shutdown procedures begin.

(2) For condition E.1.2(b), method 9 and the procedures in 40 CFR 60.11, shall be used to determine the opacity.

E.1.9 Particulate Matter Control [326 IAC 2-7-6(6)]

(a) The baghouses for particulate control shall be in operation and control particulate emissions at all times the three (3) pulverization equipment trains are in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

E.1.10 NSPS Coal Preparation Monitoring Requirements [40 CFR 60.254]

Pursuant to 40 CFR 60.253(a), the Permittee of any thermal dryer shall install, calibrate, maintain and continuously operate monitoring devices as follows:

(1) A monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within +/- 3 degrees F.

(2) All monitoring devices under 40 CFR 60.254(a) are to be recalibrated annually in accordance with procedures under 40 CFR 60.13(b).

E.1.11 Visible Emissions Notations

(a) Visible emission notations of the pulverization equipment train SS-1 baghouse stacks 1A, 1B and 1C; pulverization equipment train SS-2 baghouse stacks 2A, 2B and 2C; and pulverization equipment train SS-3, baghouse stacks 3A, 3B and 3C shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation

with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

E.1.12 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouses used in conjunction with each pulverization equipment train, at least once per day when each pulverization equipment train is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation of this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ shall be calibrated at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

E.1.13 Record Keeping Requirements

(a) To document the compliance status with Condition E.1.3, the Permittee shall maintain records of the monthly natural gas usage in the three (3) air preheaters.

(b) To document the compliance status with Conditions E.1.11, the Permittee shall maintain records of once per day visible emission notations of the three (3) pulverization equipment train baghouse stacks exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(c) To document the compliance status with Condition E.1.12, the Permittee shall maintain records once per day of the pressure drop during normal operation. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g. the process did not operate that day).

(d) To document the compliance status with Condition E.1.7, the Permittee shall maintain records of the stacks tested during each five year test cycle.

(e) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

E.1.14 Reporting Requirements

A quarterly summary of the information to document the compliance status with conditions E.1.3 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a responsible official.

SECTION E.2 Facility Operation Conditions

Facility Description [326 IAC 2-7-5(15)]: The pulverized coal storage and feed system located in the West

(a) One (1) Pulverized Coal Transport, identified as Line A, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (A) exhausting to stack (SS-5).

(b) One (1) Pulverized Coal Transport, identified as Line B, constructed in 1993, with a maximum capacity of 210 tons per hour, ducted to a baghouse (B) exhausting to stack (SS-6).

(c) One (1) Pulverized Coal storage reservoir, constructed in 1993, with a maximum capacity of 600 tons, blanketed with nitrogen and ducted to a baghouse (vent filter house) exhausting to stack (SS-7).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

E.2.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart Y.

E.2.2 NSPS Coal Preparation Plant [326 IAC 12-1][40 CFR 60 Subpart Y]

Pursuant to 40 CFR 60.252 (c), the Permittee shall not cause to be discharged into the atmosphere from any coal processing equipment (two (2) coal transport lines and coal storage reservoir) gases which exhibit twenty percent (20%) opacity or greater.

E.2.3 PM and PM_{10} Minor Limits [326 IAC 2-2][326 IAC 2-1.1-5]

(a) The particulate matter (PM) from stacks SS-5, SS-6 and SS-7 shall each not exceed 0.2 pounds per hour.

(b) The particulate matter less than 10 microns (PM_{10}) from stacks SS-5, SS-6 and SS-7 shall each not exceed 0.12 pounds per hour.

(c) Compliance with the limitations in conditions E.1.4(a), E.2.3(a) and E.4.3(a) combined limits PM to less than 25 tons per year and makes 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.

(d) Compliance with the limitations in conditions E.1.4(b), E.2.3(b) and E.4.3(b) combined limits PM_{10} to less than 15 tons per year and makes 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.

E.2.4 Particulate Limitations [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a) (Particulate Matter Limitations for Lake County), the particulate matter from the stacks SS-5, SS-6 and SS-7 shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf).

E.2.5 Preventive Maintenance Plan

A Preventive Maintenance Plan is required for the pulverized coal transport lines, coal storage reservoir and the associated baghouses. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

E.2.6 NSPS Coal Preparation Plant [40 CFR 60.245]

Pursuant to 40 CFR 60.254, the Permittee shall demonstrate compliance as follows:

(a) In conducting the performance tests required in 40 CFR 60.8, the Permittee shall use as reference methods and procedures, the test methods in 40 CFR 60 Appendix A or other methods and procedures as specified in 40 CFR 60.254, except as provided in 40 CFR 60.8(b).

(b) The Permittee shall determine compliance with the opacity standards in condition E.2.2, Method 9 and the procedures in 40 CFR 60.11, shall be used to determine opacity.

E.2.7 Testing Requirements

(a) Not later than 36 months after issuance of Part 70 Operating Permit No. T089-7171-00169 (issued on July 19, 2006) and in order to comply with conditions E.2.3 and E.2.4 the Permittee shall perform PM/ PM_{10} stack tests on one of the pulverized coal transport stacks SS-5 or SS-6 and the pulverized coal storage reservoir stack SS-7, utilizing a testing method approved by the commissioner. PM_{10} includes filterable and condensable PM_{10}. These tests shall be repeated at least once every five years from the date of the most recent valid compliance demonstration.

The second five year cycle of tests shall be performed on the pulverized coal transport stacks SS-5 or SS-6 not previously tested and the pulverized coal storage reservoir stack SS-7. PM_{10} includes filterable and condensable PM_{10}. These tests shall be repeated at least once every five years from the date of the most recent valid compliance demonstration.

The next five year test cycle will repeat the first five year cycle of testing.

(b) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation wtih regard to the performance testing required by this condition.

E.2.8 Particulate Control

The baghouses and vent filter house for the for particulate control shall be in operation and control particulate emissions at all times when the pulverized coal transport lines and coal storage reservoir are in operation.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

E.2.9 Record Keeping Requirements

(a) To document the compliance status with Condition E.2.7, the Permittee shall maintain records of the stacks tested during each five year testing cycle.

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

SECTION E.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: The coal handling thaw shed

One (1) non-vented railcar heater system, constructed in 1993, with a maximum capacity of 14 MMBtu per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

E.3.1 PSD Minor Limit (NO_X) [326 IAC 2-2]

Pursuant to CP (45) 1895 issued October 26, 1990, the NO_X emissions from the railcar heater and pulverized coal preheaters (Section E.1) shall be limited to 37 tons per 12 consecutive month period. Pursuant to CP(45) 1895, the natural gas usage in the railcar heater shall be limited to less than 12.504 million cubic feet per 12 consecutive month period with compliance demonstrated at the end of each month. The natural gas usage in the railcar heater shall be limited to less than 5 million cubic feet per month. Compliance with this limit restricts the potential to emit for NO_X to less than 37 tons per year for the railcar heater and makes the provisions of 326 IAC 2-2 Prevention of Significant Deterioration (PSD), not applicable.

E.3.2 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3]

(a) Pursuant to 326 IAC 6-4-2:

(1) The railcar heater generating fugitive dust shall be in violation of this rule (326 IAC 6-4) if any of the following criteria are violated:

(A) A source or combination of sources which cause to exist fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations as determined by the following formula:

$$P = \frac{100\,(R - U)}{U}$$

Where
P = Percentage increase
R = Number of particles of fugitive dust measured at downward receptor site
U = Number of particles of fugitive dust measured at upwind or background site

(B) The fugitive dust is comprised of fifty percent (50%) or more respirable dust, then the percent increase of dust concentration in subdivision (1) of this section shall be modified as follows:

$$PR = (1.5 \pm N)\,P$$

Where
N = Fraction of fugitive dust that is respirable dust;
PR = allowable percentage increase in dust concentration above background; and
P = no value greater than sixty-seven percent (67%).

(C) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.

(D) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subdivisions (1), (2) or (3) of this section. 326 IAC 6-4-2(4) is not federally enforceable.

(2) Pursuant to 326 IAC 6-4-6(6) (Exceptions), fugitive dust from a source caused by adverse meteorological conditions will be considered an exception to this rule (326 IAC 6-4) and therefore not in violation.

(b) Pursuant to 326 IAC 6.8-10-3 Lake County Fugitive Particulate Matter Emissions Limitations, fugitive emissions from the railcar heater generating fugitive dust shall comply with the emissions limitations in Section C - Fugitive Dust Emissions.

E.3.3 Preventive Maintenance Plan

A Preventive Maintenance Plan is required for the railcar heater and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

E.3.4 Record Keeping Requirements

(a) To document the compliance status with Conditions E.3.1, the Permittee shall maintain records of the monthly natural gas usage in the rail car heaters.

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

E.3.5 Reporting Requirements

A quarterly summary of the information to document the compliance status with condition E.3.1 shall be not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee’s obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a responsible official.

SECTION E.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: The coal handling processes

(a) One (1) Railcar Dumper, identified as RCD-1, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse 8AB exhausting through one or two fans to stacks 8A and/or 8B.

(b) One (1) Reclaim Hopper, identified as RCH-1, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to baghouse DC-6 and exhausting to stack DC-6.

(c) One (1) Car Dump Hopper 1/C1, identified as FS-8, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to baghouse DC-1 exhausting to stack F1.

(d) One (1) Car dump Hopper 2/C1, identified as FS-9, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-2 exhausting to stack F2.

(e) One (1) Car Dump Hopper 3/C1, identified as FS-10, constructed in 1993, with a maximum capacity of 200 tons per hour, ducted to a baghouse DC-3 exhausting to stack F3.

(f) One (1) Transfer Point C1/C2, identified as FS-2, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse (DC-4) exhausting to stack (F4).

(g) One (1) Reclaim Hopper/C2, identified as FS-14, constructed in 1993, with a maximum capacity of 300 tons per hour, ducted to a baghouse DC-5 exhausting to stack F5.

(h) One (1) Screen Transfer/C2, identified as FS-3, constructed in 1993, with a maximum capacity of 600 toms per hour, ducted to a baghouse DC-7 exhausting to stack F7.

(i) One (1) Screen/C3 Gate Transfer identified as FS-11, constructed in 1993, ducted to a baghouse DC-8 exhausting to stack F8.

(j) One (1) Screen/C4 Gate Transfer, identified as FS-12, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-9 exhausting to stack F9.

(k) One (1) Transfer Point C4/C5, identified as FS-4, constructed in 1993, ducted to a baghouse DC-10 exhausting to stack F10.

East Building- Coal Handling

(a) One (1) Transfer Point C5/C6, identified as FS-5, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to a baghouse DC-11 exhausting to stack F11.

(b) One (1) Transfer Point C6/Bin 1, identified as FS-7, constructed in 1993, ducted to baghouse DC-12 exhausting to stack F12.

(c) One (1) Transfer Point C5/Bin 2, identified as FS-6, constructed in 1993, ducted to baghouse DC-13 exhausting to stack F13.

(d) One (1) Transfer Point C6/Bin 3, identified as FS-13, constructed in 1993, with a maximum capacity of 600 tons per hour, ducted to baghouse DC-14 exhausting to stack F14.

Coal Piles and Haul Roads

(a) One coal pile operation, identified as F17, constructed in 1993, with a storage capacity of 100,000 tons and an area of 2 acres.

(b) Haul – Roads – Vehicle Traffic

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

E.4.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart Y.

E.4.2 NSPS Coal Preparation Plant [326 IAC 12-1][40 CFR 60 Subpart Y]

Pursuant to 40 CFR 60.252 (c), the particulate matter opacity from the coal handling processes, shall not exceed twenty percent (20%) opacity.

E.4.3 PM and PM_{10} Minor Limits [326 IAC 2-2][326 IAC 2-1.1-5]

(a) The particulate matter (PM) from stacks 8A, 8B, DC-6, F1 through F5 and F7 through F17 shall each not exceed 0.2 pounds per hour.

(b) The particulate matter less than 10 microns (PM_{10}) from stacks 8A, 8B, DC-6, F1 through F5 and F7 through F17 shall each not exceed 0.12 pound per hour.

(c) Compliance with the limitations in conditions E.1.4(a), E.2.3(a) and E.4.3(a) combined limits PM to less than 25 tons per year and makes 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.

(d) Compliance with the limitations in conditions E.1.4(b), E.2.3(b) and E.4.3(b) combined limits PM_{10} to less than 15 tons per year and makes 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.

E.4.4 Particulate Limitations [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a) (Particulate Matter Limitations for Lake County), the particulate matter from the railcar dumpers, hoppers, screens, transfer points and east building transfer points and bins stacks 8A, 8B, DC-6, F1 through F5, F7 through F14 shall not exceed three-hundreds (0.03) grain per dry standard cubic foot (dscf).

E.4.5 Preventive Maintenance Plan

A Preventive Maintenance Plan is required for the railcar dumpers, hoppers screens, transfer points and associated baghouses. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

E.4.6 NSPS Coal Preparation Plants [40 CFR 60.254]

Pursuant to 40 CFR 60.254, the Permittee shall demonstrate compliance using the following:

(a) In conducting the performance tests required in 40 CFR 60.8, the Permittee shall use as reference methods and procedures, the test methods in 40 CFR 60 Appendix A or other

methods and procedures as specified in 40 CFR 60.254, except as provided in 40 CFR 60.8(b).

(b) The Permittee shall determine compliance with the particulate matter standards in condition D.4.2, Method 9 and the procedures in 40 CFR 60.11, shall be used to determine opacity.

E.4.7 Testing Requirements

Not later than 36 months after issuance of Part 70 Operating Permit No. T089-7171-00169 (issued on July 19, 2006) and in order to comply with conditions E.4.3 and E.4.4 the Permittee shall perform PM/ PM_{10} stack tests on Railcar Dumper Stacks 8A and 8B and one of each of the following:

(a) Reclaim Hopper RCH-1 baghouse Stack DC-6 or Reclaim Hopper/C2 stack F5;

(b) Car Dump Hopper 1/C1 stack F1, Car Dump Hopper 2/C2 stack F2 or Car Dump Hopper 3/C3 stack F3;

(c) Transfer Point C1/C2 Stack F4, Transfer Point C4/C5 stack F10 or Transfer Point C5/C6 stack F11;

(d) Screen Transfer/C2 stack F7, Screen Transfer/C3 gate Transfer stack F8 or Screen Transfer/C4 Gate Transfer stack F9; and

(e) Transfer Point C6/Bin 1, stack F12, Transfer Point C5/Bin 2, stack F13 or Transfer Point C6/Bin 3 stack F14

utilizing a testing method approved by the commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM_{10} includes filterable and condensable PM_{10}. These tests shall be repeated at least once every five years from the date of the most recent valid compliance demonstration.

The second five year cycle of PM/ PM_{10} tests shall be performed on the Railcar Dumper Stacks 8A and 8B and one of each of the following not tested previously:

(a) Reclaim Hopper RCH-1 baghouse Stack DC-6 or Reclaim Hopper/C2 stack F5;

(b) Car Dump Hopper 1/C1 stack F1, Car Dump Hopper 2/C2 stack F2 or Car Dump Hopper 3/C3 stack F3;

(c) Transfer Point C1/C2 Stack F4, Transfer Point C4/C5 stack F10 or Transfer Point C5/C6 stack F11;

(d) Screen Transfer/C2 stack F7, Screen Transfer/C3 gate Transfer stack F8 or Screen Transfer/C4 Gate Transfer stack F9; and

(e) Transfer Point C6/Bin 1, stack F12, Transfer Point C5/Bin 2, stack F13 or Transfer Point C6/Bin 3 stack F14

utilizing a testing method approved by the commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM_{10} includes filterable and condensable PM_{10}. These tests shall be

repeated at least once every five years from the date of the most recent valid compliance demonstration.

The third five year cycle of PM/ PM_{10} tests shall be performed on the Railcar Dumper Stacks 8A and 8B, Reclaim Hopper RCH-1 baghouse Stack DC-6 or Reclaim Hopper/C2 stack F5 and one of each of the following not tested previously in test cycle one or two:

(a) Car Dump Hopper 1/C1 stack F1, Car Dump Hopper 2/C2 stack F2 or Car Dump Hopper 3/C3 stack F3;

(b) Transfer Point C1/C2 Stack F4, Transfer Point C4/C5 stack F10 or Transfer Point C5/C6 stack F11;

(c) Screen Transfer/C2 stack F7, Screen Transfer/C3 gate Transfer stack F8 or Screen Transfer/C4 Gate Transfer stack F9; and

(d) Transfer Point C6/Bin 1, stack F12, Transfer Point C5/Bin 2, stack F13 or Transfer Point C6/Bin 3 stack F14

utilizing a testing method approved by the commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM_{10} includes filterable and condensable PM_{10}. These tests shall be repeated at least once every five years from the date of the most recent valid compliance demonstration.

E.4.8 Particulate Control

The baghouses for particulate control shall be in operation and control particulate emissions at all times the railcar dumpers, hoppers screens, and transfer points are in operation.

E.4.9 Fugitive Dust Control

A dust suppressant shall be applied to the coal piles and roads as necessary during the handling and transporting of coal.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

E.4.10 Record Keeping Requirements

(a) To document the compliance status with Condition E.4.7, the Permittee shall maintain records of the stacks tested during each five year testing cycle.

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

SECTION E.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Specifically Regulated insignificant activities include the following facilities, emission units, fugitive sources, control equipment, process equipment and operational practices:

(a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

(b) Cleaners and solvents characterized as follows:

(1) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38°C (100°F) or;
(2) Having a vapor pressure equal to or less than 0.7 kPA; 5mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

(c) One (1) 5,000 gallon #2 diesel fuel tank - A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

E.5.1 Volatile Organic Compounds (VOC) [326 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control),for cold cleaner degreaser operations without remote solvent reservoirs existing as of July 1, 1990, located in Clark, Elkhart, Floyd, Lake, Marion, Porter or St. Joseph Counties, the Permittee shall ensure that the following requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

E.5.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-8] (Material require¬ments for cold cleaning degreasers)

Pursuant to 326 IAC 8-3-8 (Material requirements for cold cleaning degreasers), the users, providers, and manufacturers of solvents for use in cold cleaning degreasers in Clark, Floyd, Lake, and Porter Counties, except for solvents intended to be used to clean electronic components shall do the following:

(a) On and after November 1, 1999, no person shall Operate a cold cleaning degreaser with a solvent vapor pressure that exceeds two (2) millimeters of mercury (thirty-eight thousandths (0.038) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(b) On and after May 1, 2001, no person shall Operate a cold cleaning degreaser with a solvent vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(c) On and after November 1, 1999, all persons subject to the requirements of 326 IAC 8-3-8 (c)(1)(B) and (c)(2)(B) shall maintain each of the following records for each purchase:

(1) The name and address of the solvent supplier.

(2) The date of purchase.

(3) The type of solvent.

(4) The volume of each unit of solvent.

(5) The total volume of the solvent.

(6) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

(d) All records required by 326 IAC 8-3-8 (d) shall be retained on-site for the most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period.

E.5.3 Volatile Organic Liquid Storage Vessels [326 IAC 8-9-1]

(a) Pursuant to 326 IAC 8-9-1(a) and (b) (Volatile Organic Liquid Storage Vessels), on and after October 1, 1995, stationary vessels used to store volatile organic liquids (VOL), that are located in Clark, Floyd, Lake or Porter County with a capacity of less than thirty nine thousand (39,000) gallons are subject to the reporting and record keeping requirements of this rule. The VOL storage vessels are exempted from all other provisions of this rule.

(b) Pursuant to 326 IAC 8-9-6(a) and (b), the Permittee shall maintain the following records for the life of the stationary storage vessels and submit a report to IDEM, OAQ containing the following for each vessel:

(1) The vessel identification number,

(2) The vessel dimensions, and

(3) The vessel capacity.

SECTION F Nitrogen Oxides Budget Trading Program - NO_X Budget Permit for NO_X Budget Units Under 326 IAC 10-4-1(a)

ORIS Code: 50733

NO_X Budget Source [326 IAC 2-7-5(15)]

One (1) Boiler House No. 4, emissions group 720, comprised of the following:

(a) Two (2) Boilers, 720 No. 1 and No. 2, identified as O4B10459 and O4B20460, constructed in 1967, equipped to combust natural gas, blast furnace gas and fuel oil, with a heat input of 500 MMBtu per hour each, exhausting through Stacks O46268 and O46269, respectively.

(b) One (1) Boiler, 720 No. 3, identified as O4B30461, constructed in 1967, equipped to combust blast furnace gas and natural gas, with a heat input of 500 MMBtu per hour, exhausting through Stack O46270.

One (1) Turbo Blower Boiler House (TBBH), emissions group 701, comprised of the following:

(a) Three (3) Boilers, 701 No. 1, No. 2, and No. 3, identified as OTB10462, OTB20463 and OTB30464, constructed in 1948, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a heat input of 410 MMBtu per hour each, exhausting through Stacks OT6271, OT6272 and OT6273, respectively.

(b) One (1) Boiler 701 No. 5, identified as OTB50466, constructed in 1958, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a heat input of 410 MMBtu per hour, exhausting through Stack OT6275.

(c) One (1) boiler 701 No. 6, identified as OTB60467, constructed prior to August 17, 1971, equipped to combust blast furnace gas and natural gas, with a heat input capacity of 710 MMBtu per hour, exhausting through Stack OT6276.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

F.1 Automatic Incorporation of Definitions [326 IAC 10-4-7(e)]

This NO_X budget permit is deemed to incorporate automatically the definitions of terms under 326 IAC 10-4-2.

F.2 Standard Permit Requirements [326 IAC 10-4-4(a)]

(a) The owners and operators of the NO_X budget source and each NO_X budget unit shall operate each unit in compliance with this NO_X budget permit.

(b) The NO_X budget units subject to this NO_X budget permit are the following:

(1) At Boiler House No. 4, 720 No. 1, 720 No. 2, and 720 No. 3; and

(2) At Turbo Blower Boiler House, 701 No. 1, 701 No. 2, 701 No. 3, 701 No. 5, and 701 No. 6.

F.3 Monitoring Requirements [326 IAC 10-4-4(b)]

(a) The owners and operators and, to the extent applicable, the NO_X authorized account representative of the NO_X budget source and each NO_X budget unit at the source shall comply with the monitoring requirements of 40 CFR 75 and 326 IAC 10-4-12.

(b) The emissions measurements recorded and reported in accordance with 40 CFR 75 and 326 IAC 10-4-12 shall be used to determine compliance by each unit with the NO_X budget emissions limitation under 326 IAC 10-4-4(c) and Condition F.4, Nitrogen Oxides Requirements.

F.4 Nitrogen Oxides Requirements [326 IAC 10-4-4(c)]

(a) The owners and operators of the NO_X budget source and each NO_X budget unit at the source shall hold NO_X allowances available for compliance deductions under 326 IAC 10-4-10(j), as of the NO_X allowance transfer deadline, in each unit's compliance account and the source's overdraft account in an amount:

(1) Not less than the total NO_X emissions for the ozone control period from the unit, as determined in accordance with 40 CFR 75 and 326 IAC 10-4-12;

(2) To account for excess emissions for a prior ozone control period under 326 IAC 10-4-10(k)(5); or

(3) To account for withdrawal from the NO_X budget trading program, or a change in regulatory status of a NO_X budget opt in unit.

(b) Each ton of NO_X emitted in excess of the NO_X budget emissions limitation shall constitute a separate violation of the Clean Air Act (CAA) and 326 IAC 10-4.

(c) Each NO_X budget unit shall be subject to the requirements under (a) above and 326 IAC 10-4-4(c)(1) starting on May 31, 2004.

(d) NO_X allowances shall be held in, deducted from, or transferred among NO_X allowance tracking system accounts in accordance with 326 IAC 10 4 9 through 11, 326 IAC 10-4-13, and 326 IAC 10-4-14.

(e) A NO_X allowance shall not be deducted, in order to comply with the requirements under (a) above and 326 IAC 10-4-4(c)(1), for an ozone control period in a year prior to the year for which the NO_X allowance was allocated.

(f) A NO_X allowance allocated under the NO_X budget trading program is a limited authorization to emit one (1) ton of NO_X in accordance with the NO_X budget trading program. No provision of the NO_X budget trading program, the NO_X budget permit application, the NO_X budget permit, or an exemption under 326 IAC 10-4-3 and no provision of law shall be construed to limit the authority of the U.S. EPA or IDEM, OAQ to terminate or limit the authorization.

(g) A NO_X allowance allocated under the NO_X budget trading program does not constitute a property right.

(h) Upon recordation by the U.S. EPA under 326 IAC 10-4-10, 326 IAC 10-4-11, or 326 IAC 10-4-13, every allocation, transfer, or deduction of a NO_X allowance to or from each NO_X budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, this NO_X budget permit of the NO_X budget unit by operation of law without any further review.

F.5 Excess Emissions Requirements [326 IAC 10-4-4(d)]

The owners and operators of each NO_X budget unit that has excess emissions in any ozone control period shall do the following:

(a) Surrender the NO_X allowances required for deduction under 326 IAC 10-4-10(k)(5).

(b) Pay any fine, penalty, or assessment or comply with any other remedy imposed under 326 IAC 10-4-10(k)(7).

F.6 Record Keeping Requirements [326 IAC 10-4-4(e)] [326 IAC 2-7-5(3)]

Unless otherwise provided, the owners and operators of the NO_X budget source and each NO_X budget unit at the source shall keep, either on site at the source or at a central location within Indiana for those owners or operators with unattended sources, each of the following documents for a period of five (5) years:

(a) The account certificate of representation for the NO_X authorized account representative for the source and each NO_X budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 326 IAC 10-4-6(h). The certificate and documents shall be retained either on site at the source or at a central location within Indiana for those owners or operators with unattended sources beyond the five (5) year period until the documents are superseded because of the submission of a new account certificate of representation changing the NO_X authorized account representative.

(b) All emissions monitoring information, in accordance with 40 CFR 75 and 326 IAC 10-4-12, provided that to the extent that 40 CFR 75 and 326 IAC 10-4-12 provide for a three (3) year period for record keeping, the three (3) year period shall apply.

(c) Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_X budget trading program.

(d) Copies of all documents used to complete a NO_X budget permit application and any other submission under the NO_X budget trading program or to demonstrate compliance with the requirements of the NO_X budget trading program.

This period may be extended for cause, at any time prior to the end of five (5) years, in writing by IDEM, OAQ or the U.S. EPA. Records retained at a central location within Indiana shall be available immediately at the location and submitted to IDEM, OAQ or U.S. EPA within three (3) business days following receipt of a written request. Nothing in 326 IAC 10-4-4(e) shall alter the record retention requirements for a source under 40 CFR 75. Unless otherwise provided, all records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

F.7 Reporting Requirements [326 IAC 10-4-4(e)]

(a) The NO_X authorized account representative of the NO_X budget source and each NO_X budget unit at the source shall submit the reports and compliance certifications required under the NO_X budget trading program, including those under 326 IAC 10-4-8, 326 IAC 10-4-12, or 326 IAC 10-4-13.

(b) Pursuant to 326 IAC 10-4-4(e) and 326 IAC 10-4-6(e)(1), each submission shall include the following certification statement by the NO_X authorized account representative: "I am authorized to make this submission on behalf of the owners and operators of the NO_X budget sources or NO_X budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of

those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(c) Where 326 IAC 10-4 requires a submission to IDEM, OAQ, the NO_X authorized account representative shall submit required information to:

Indiana Department of Environmental Management
Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(d) Where 326 IAC 10-4 requires a submission to U.S. EPA, the NO_X authorized account representative shall submit required information to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue, NW
Mail Code 6204N
Washington, DC 20460

F.8 Liability [326 IAC 10-4-4(f)]

The owners and operators of each NO_X budget source shall be liable as follows:

(a) Any person who knowingly violates any requirement or prohibition of the NO_X budget trading program, a NO_X budget permit, or an exemption under 326 IAC 10-4-3 shall be subject to enforcement pursuant to applicable state or federal law.

(b) Any person who knowingly makes a false material statement in any record, submission, or report under the NO_X budget trading program shall be subject to criminal enforcement pursuant to the applicable state or federal law.

(c) No permit revision shall excuse any violation of the requirements of the NO_X budget trading program that occurs prior to the date that the revision takes effect.

(d) Each NO_X budget source and each NO_X budget unit shall meet the requirements of the NO_X budget trading program.

(e) Any provision of the NO_X budget trading program that applies to a NO_X budget source, including a provision applicable to the NO_X authorized account representative of a NO_X budget source, shall also apply to the owners and operators of the source and of the NO_X budget units at the source.

(f) Any provision of the NO_X budget trading program that applies to a NO_X budget unit, including a provision applicable to the NO_X authorized account representative of a NO_X budget unit, shall also apply to the owners and operators of the unit. Except with regard to the requirements applicable to units with a common stack under 40 CFR 75 and 326 IAC 10-4-12, the owners and operators and the NO_X authorized account representative of one (1) NO_X budget unit shall not be liable for any violation by any other NO_X budget unit of which they are not owners or operators or the NO_X authorized account representative and that is located at a source of which they are not owners or operators or the NO_X authorized account representative.

F.9 Effect on Other Authorities [326 IAC 10-4-4(g)]

No provision of the NO_X budget trading program, a NO_X budget permit application, a NO_X budget permit, or an exemption under 326 IAC 10-4-3 shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NO_X authorized account representative of a NO_X budget source or NO_X budget unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the CAA.

SECTION G Clean Air Interstate (CAIR) Nitrogen Oxides Ozone Season Trading Program – CAIR Permit for CAIR Units Under 326 IAC 24-3-1(a)

ORIS Code: 50733

CAIR Permit for CAIR Units Under 326 IAC 24-3-1(a)

(a) One (1) Boiler House No. 4, emissions group 720, comprised of the following:

(1) Two (2) Boilers, 720 No. 1 and No. 2, identified as O4B10459 and O4B20460, constructed in 1967, equipped to combust natural gas, blast furnace gas and fuel oil, with a heat input of 500 MMBtu per hour each, exhausting through Stacks O46268 and O46269, respectively.

(2) One (1) Boiler, 720 No. 3, identified as O4B30461, constructed in 1967, equipped to combust blast furnace gas and natural gas, with a heat input of 500 MMBtu per hour, exhausting through Stack O46270.

(b) One (1) Turbo Blower Boiler House (TBBH), emissions group 701, comprised of the following:

(1) Three (3) Boilers, 701 No. 1, No. 2, and No. 3, identified as OTB10462, OTB20463 and OTB30464, constructed in 1948, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a heat input of 410 MMBtu per hour each, exhausting through Stacks OT6271, OT6272 and OT6273, respectively.

(2) One (1) Boiler 701 No. 5, identified as OTB50466, constructed in 1958, equipped to combust blast furnace gas, coke oven gas, fuel oil and natural gas, with a heat input of 410 MMBtu per hour, exhausting through Stack OT6275.

(3) One (1) boiler 701 No. 6, identified as OTB60467, constructed prior to August 17, 1971, equipped to combust blast furnace gas and natural gas, with a heat input capacity of 710 MMBtu per hour, exhausting through Stack OT6276.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

G.1 Automatic Incorporation of Definitions [326 IAC 24-3-7(e)] [40 CFR 97.323(b)]

This CAIR permit is deemed to incorporate automatically the definitions of terms under 326 IAC 24-3-2.

G.2 Standard Permit Requirements [326 IAC 24-3-4(a)] [40 CFR 97.306(a)]

(a) The owners and operators of the CAIR NO_X ozone season source and CAIR NO_X ozone season units shall operate each unit in compliance with this CAIR permit.

(b) The CAIR NO_X ozone season units subject to this CAIR permit are 701B1, 701B2, 701B3, 701B5, 701B6, 720B1, 720B2 and 720B3.

G.3 Monitoring, Reporting, and Record Keeping Requirements [326 IAC 24-3-4(b)] [40 CFR 97.306(b)]

(a) The owners and operators, and the CAIR designated representative, of each CAIR NO_X ozone season source and CAIR NO_X ozone season unit at the source shall comply with the monitoring, reporting, and record keeping requirements of 326 IAC 24-3-11.

(b) The emissions measurements recorded and reported in accordance with 326 IAC 24-3-11 shall be used to determine compliance by each CAIR NO_X ozone season source with the CAIR NO_X ozone season emissions limitation under 326 IAC 24-3-4(c) and Condition G.4. Nitrogen Oxides Ozone Season Emission Requirements.

G.4 Nitrogen Oxides Ozone Season Emission Requirements [326 IAC 24-3-4(c)] [40 CFR 97.306(c)]

(a) As of the allowance transfer deadline, the owners and operators of the each CAIR NO_X ozone season source and each CAIR NO_X ozone season unit at the source shall hold, in the source's compliance account, CAIR NO_X ozone season allowances available for compliance deductions for the control period under 326 IAC 24-3-9(i) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_X ozone season units at the source, as determined in accordance with 326 IAC 24-3-11.

(b) A CAIR NO_X unit shall be subject to the requirements under (a) above and 326 IAC 24-3-4(c)(1) starting on the deadline for meeting the unit's monitor certifications requirements under 326 IAC 24-3-11(C)(1), 11(c)(2),11(c)(3), or 11(c)(7) and for each control period thereafter.

(c) A CAIR NO_X ozone season allowance shall not be deducted for compliance with the requirements under (a) above and 326 IAC 24-3-4(c)(1), for a control period in a calendar year before the year for which the CAIR NO_X ozone season allowance was allocated.

(d) CAIR NO_X ozone season allowances shall be held in, deducted from, or transferred into or among CAIR NO_X ozone season allowance tracking system accounts in accordance with 326 IAC 24-3-9, 326 IAC 24-3-10, and 326 IAC 24-3-12.

(e) A CAIR NO_X allowance is a limited authorization to emit one (1) ton of nitrogen oxides in accordance with the CAIR NO_X ozone season trading program. No provision of the CAIR NO_X ozone season trading program, the CAIR permit application, the CAIR permit, or an exemption under 326 IAC 24-3-3 and no provision of law shall be construed to limit the authority of the State of Indiana or the United States to terminate or limit the authorization.

(f) A CAIR NO_X allowance does not constitute a property right.

(g) Upon recordation by the U.S. EPA under 326 IAC 24-3-8, 326 IAC 24-3-9, 326 IAC 24-3-10, or 326 IAC 24-3-12, every allocation, transfer, or deduction of a CAIR NO_X ozone season allowance to or from a CAIR NO_X ozone season source's compliance account is incorporated automatically in this CAIR permit.

G.5 Excess Emissions Requirements [326 IAC 24-3-4(d)] [40 CFR 97.306(d)]

(a) The owners and operators of a CAIR NO_X ozone season source and each CAIR NO_X ozone season unit that emits nitrogen oxides during any control period in excess of the CAIR NO_X ozone season emissions limitation shall do the following:

(1) Surrender the CAIR NO_X ozone season allowances required for deduction under 326 IAC 24-3-9(j)(4).

(2) Pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, the Clean Air Act (CAA) or applicable state law.

Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 326 IAC 24-3-4, the Clean Air Act (CAA), and applicable state law.

G.6 Record Keeping Requirements [326 IAC 24-3-4(e)] [326 IAC 2-7-5(3)] [40 CFR 97.306(e)]

Unless otherwise provided, the owners and operators of the CAIR NO_X ozone season source and each CAIR NO_X ozone season unit at the source shall keep on site at the source or at a central location within Indiana for those owners or operators with unattended sources, each of the following documents for a period of five (5) years from the date the document was created:

(a) The certificate of representation under 326 IAC 24-3-6(h) for the CAIR designated representative for the source and each CAIR NO_X ozone season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation. The certificate and documents shall be retained on site at the source or at a central location within Indiana for those owners or operators with unattended sources beyond such five (5) year period until such documents are superseded because of the submission of a new account certificate of representation under 326 IAC 24-3-6(h) changing the CAIR designated representative.

(b) All emissions monitoring information, in accordance with 326 IAC 24-3-11, provided that to the extent that 326 IAC 24-3-11 provides for a three (3) year period for record keeping, the three (3) year period shall apply.

(c) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_X ozone season trading program.

(d) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_X ozone season trading program or to demonstrate compliance with the requirements of the CAIR NO_X ozone season trading program.

This period may be extended for cause, at any time before the end of five (5) years, in writing by IDEM, OAQ or the U.S. EPA. Unless otherwise provided, all records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

G.7 Reporting Requirements [326 IAC 24 3 4(e) [40 CFR 97.306(e)]

(a) The CAIR designated representative of the CAIR NO_X ozone season source and each CAIR NO_X ozone season unit at the source shall submit the reports required under the CAIR NO_X ozone season trading program, including those under 326 IAC 24-3-11.

(b) Pursuant 326 IAC 24-3-4(e) and 326 IAC 24-3-6(e)(1), each submission under the CAIR NO_X ozone season trading program shall include the following certification statement by the CAIR designated representative: “I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(c) Where 326 IAC 24-3 requires a submission to IDEM, OAQ, the CAIR designated representative shall submit required information to:

Indiana Department of Environmental Management
Office of Air Quality
100 North Senate Avenue
MC 61 53, IGCN 1003
Indianapolis, Indiana 46204-2251

(d) Where 326 IAC 24-3 requires a submission to U.S. EPA, the CAIR designated representative shall submit required information to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue, NW
Mail Code 6204N
Washington, DC 20460

G.8 Liability [326 IAC 24-3-4(f)] [40 CFR 97.306(f)]

The owners and operators of each CAIR NO_X ozone season source and each CAIR NO_X ozone season unit shall be liable as follows:

(a) Each CAIR NO_X ozone season source and each CAIR NO_X ozone season unit shall meet the requirements of the CAIR NO_X ozone season trading program.

(b) Any provision of the CAIR NO_X ozone season trading program that applies to a CAIR NO_X ozone season source or the CAIR designated representative of a CAIR NO_X ozone season source shall also apply to the owners and operators of such source and of the CAIR NO_X ozone season units at the source.

(c) Any provision of the CAIR NO_X ozone season trading program that applies to a CAIR NO_X ozone season unit or the CAIR designated representative of a CAIR NO_X ozone season unit shall also apply to the owners and operators of such units.

G.9 Effect on Other Authorities [326 IAC 24-3-4(g)] [40 CFR 97.306(g)]

No provision of the CAIR NO_X ozone season trading program, a CAIR permit application, a CAIR permit, or an exemption under 326 IAC 24-3-3 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_X ozone season source or CAIR NO_X ozone season unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act (CAA).

SECTION H.1 FACILITY OPERATION CONDITIONS - NSPS, SUBPART Dc

Facility Description [326 IAC 2-7-5(15)]: Note: Complete Descriptions are shown in Section A.2.

CASP A

(m) One (1) Particle Fusion Reactor (PFR) afterburner, identified as PFRAB A1, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-A-10-SR1010), one (1) cyclone (OR-A-10-CY-1115), and one (1) baghouse (OR-A-10-DC1020), in series, exhausting to stack OR-A-10-ST1025.

(n) One (1) Particle Fusion Reactor (PFR) afterburner, identified as PFRAB A2, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-A-10-SR2010), one (1) cyclone (OR-A-10-CY-2115), and one (1) baghouse (OR-A-10-DC2020), in series, exhausting to stack OR-A-10-ST2025.

CASP B

(m) One (1) Particle Fusion Reactor (PFR) afterburner, identified as PFRAB B1, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-B-10-SR1010), one (1) cyclone (OR-B-10-CY-1115), and one (1) baghouse (OR-B-10-DC1020), in series, exhausting to stack OR-B-10-ST1025.

(n) One (1) Particle Fusion Reactor (PFR) afterburner, identified as PFRAB B2, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-B10-SR2010), one (1) cyclone (OR-B-10-CY-2115), and one (1) baghouse (OR-B-10-DC2020), in series, exhausting to stack OR-B-10-ST2025.

CASP C

(m) One (1) Particle Fusion Reactor (PFR) afterburner, identified as PFRAB C1, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-C-10-SR1010), one (1) cyclone (OR-C-10-CY-1115), and one (1) baghouse (OR-C-09-DC1020), in series, exhausting to stack OR-C-10-ST1025.

(n) One (1) Particle Fusion Reactor (PFR) afterburner, identified as PFRAB C2, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-C-10-SR2010), one (1) cyclone (OR-C-10-CY-2115), and one (1) baghouse (OR-C-10-DC2020), in series, exhausting to stack OR-C-10-ST2025.

CASP D

(m) One (1) Particle Fusion Reactor (PFR) afterburner, identified as PFRAB D1, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-D-10-SR1010), one (1) cyclone (OR-D-10-CY-1115), and one (1) baghouse (OR-D-109-DC1020), in series, exhausting to stack OR-D-10-ST1025.

(n) One (1) Particle Fusion Reactor (PFR) afterburner, identified as PFRAB D2, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-D-10-SR2010), one (1) cyclone (OR-D-10-CY-2115), and one (1) baghouse (OR-D-10-DC2020), in series, exhausting to stack OR-D-10-ST2025.

Under 40 CFR 60, Subpart Dc, each afterburner listed in this section is considered an affected steam generating unit.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

H.1.1 General Provisions Relating to New Source Performance Standards [40 CFR Part 60, Subpart A] [326 IAC 12-1]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR Part 60, Subpart Dc.

(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

H.1.2 Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units [40 CFR Part 60, Subpart Dc] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart Dc, the Permittee shall comply with the provisions of the Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (included as Attachment B of this permit), which are incorporated by reference as 326 IAC 12, as specified as follows:

(1) 40 CFR 60.40c (a), (b), and (c)
(2) 40 CFR 60.41c
(3) 40 CFR 60.48c (a)(1), (a)(2), (a)(3), (g)(1), (g)(2), (i), and (j)

SECTION H.2 FACILITY OPERATION CONDITIONS - NSPS, SUBPART Y

Facility Description [326 IAC 2-7-5(15)]: Note: Complete Descriptions are shown in Section A.2.

CASP A

(a) Raw Material Receiving Handling and Silos A, identified as RMRHSA, consisting of the following:

(1) One (1) CDA1 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) baghouse (OR-A-01-DC1105), exhausting to stack OR-A-01-ST1105.
(2) One (1) CDA2 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) dust collector (OR-A-01-DC2105), exhausting to stack OR-A-01-ST2105.
(3) Five (5) dry coal storage silos, ducted to dedicated baghouses (OR-A-02-DC1070, OR-A-02-DC2070, OR-A-02-DC3070, OR-A-02-DC4070, and OR-A-02-DC5070, respectively), exhausting to stacks OR-A-02-ST1070, OR-A-02-ST2070, OR-A-02-ST3070, OR-A-02-ST4070, and OR-A-02-ST5070, respectively.
(4) Five (5) blend #1 weigh feeders and one (1) drag conveyor, ducted to one (1) baghouse (OR-A-03-DC1105), exhausting to stack OR-A-03-ST1105.
(5) Four (4) blend #1 feed hoppers and two (2) blend #1 hopper feed drag conveyors, ducted to one (1) baghouse (OR-A-04-DC1105), exhausting to stack OR-A-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSA facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDA1, ducted to one (1) cyclone (OR-A-01-CY-1305) and one (1) dust collector (OR-A-01-DC1205), in series, exhausting to stack OR-A-01-ST115. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCA1, ducted to one (1) dust collector (OR-A-02-DC1105), exhausting to stack OR-A-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDA2, ducted to one (1) cyclone (OR-A-01-CY-2305) and one (1) dust collector (OR-A-01-DC2205), in series, exhausting to stack OR-A-01-ST2215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCA2, ducted to one (1) dust collector (OR-A-02-DC2105), exhausting to stack OR-A-02-ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(k) One (1) Carborec Storage and Blending Area A, identified as CBSBA, consisting of the following:

(1) Carborec crusher feed drag conveyors, ducted to a baghouse (OR-A-05-DC1205), exhausting to stack OR-A-05-ST1205.
(2) Six (6) weigh feeders and blend #2 drag conveyors, ducted to a baghouse (OR-A-05-DC1405), exhausting to stack OR-A-05-ST1405.
(3) One (1) Carborec storage silo, ducted to a baghouse (OR-A-05-DC6070), exhausting to stack OR-A-05-ST6070.
(4) One (1) blend #2 surge bin, ducted to a baghouse (OR-A-06-DC1405), exhausting to stack OR-A-06-ST1405.

(5) Three (3) blend #2 weigh feeders, blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, ducted to a baghouse (OR-A-06-DC1205), exhausting to stack OR-A-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

CASP B

(a) Raw Material Receiving Handling and Silos B, identified as RMRHSB, approved for construction in 2010, consisting of the following:

(1) One (1) CDB1 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) baghouse (OR-B-01-DC1105), exhausting to stack OR-B-01-ST1105.
(2) One (1) CDB2 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) dust collector (OR-B-01-DC2105), exhausting to stack OR-B-01-ST2105.
(3) Five (5) dry coal storage silos, ducted to dedicated baghouses (OR-B-02-DC1070, OR-B-02-DC2070, OR-B-02-DC3070, OR-B-02-DC4070, and OR-B-02-DC5070, respectively), exhausting to stacks OR-B-02-ST1070, OR-B-02-ST2070, OR-B-02-ST3070, OR-B-02-ST4070, and OR-B-02-ST5070, respectively.
(4) Five (5) blend #1 weigh feeders and one (1) drag conveyor, ducted to one (1) baghouse (OR-B-03-DC1105), exhausting to stack OR-B-03-ST1105.
(5) Four (4) blend #1 feed hoppers and two (2) blend #1 hopper feed drag conveyors, ducted to one (1) baghouse (OR-B-04-DC1105), exhausting to stack OR-B-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSB facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDB1, ducted to one (1) cyclone (OR-B-01-CY-1305) and one (1) dust collector (OR-B-01-DC1205), in series, exhausting to stack OR-B-01-ST1215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCB1, ducted to one (1) dust collector (OR-B-02-DC1105), exhausting to stack OR-B-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDB2, ducted to one (1) cyclone (OR-B-01-CY-2305) and one (1) dust collector (OR-B-01-DC2205), in series, exhausting to stack OR-B-01-ST2215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCB2, ducted to one (1) dust collector (OR-B-02-DC2105), exhausting to stack OR-B-02-ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(k) One (1) Carborec Storage and Blending Area B, identified as CBSBB, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, ducted to a baghouse (OR-B-05-DC1205), exhausting to stack OR-B-05-DC1205.

(2) Six (6) weigh feeders and blend #2 drag conveyors, ducted to a baghouse (OR-B-05-DC1405), exhausting to stack OR-B-05-DC1405.
(3) One (1) Carborec storage silo, ducted to a baghouse (OR-B-05-DC6070), exhausting to stack OR-B-05-ST6070.
(4) One (1) blend #2 surge bin, ducted to a baghouse (OR-B-06-DC1405), exhausting to stack OR-B-06-ST1405.
(5) Three (3) blend #2 weigh feeders, blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, ducted to a baghouse (OR-B-06-DC1205), exhausting to stack OR-B-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

CASP C

(a) Raw Material Receiving Handling and Silos C, identified as RMRHSC, approved for construction in 2010, consisting of the following:

(1) One (1) CDC1 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) baghouse (OR-C-01-DC1105), exhausting to stack OR-C-01-ST1105.
(2) One (1) CDC2 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) dust collector (OR-C-01-DC2105), exhausting to stack OR-C-01-ST2105.
(3) Five (5) dry coal storage silos, ducted to dedicated baghouses (OR-C-02-DC1070, OR-C-02-DC2070, OR-C-02-DC3070, OR-C-02-DC4070, and OR-C-02-DC5070, respectively), exhausting to stacks OR-C-02-ST1070, OR-C-02-ST2070, OR-C-02-ST3070, OR-C-02-ST4070, and OR-C-02-ST5070, respectively.
(4) Five (5) blend #1 weigh feeders and one (1) drag conveyor, ducted to one (1) baghouse (OR-C-03-DC1105), exhausting to stack OR-C-03-ST1105.
(5) Four (4) blend #1 feed hoppers and two (2) blend #1 hopper feed drag conveyors, ducted to one (1) baghouse (OR-C-04-DC1105), exhausting to stack OR-C-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSC facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDC1, ducted to one (1) cyclone (OR-C-01-CY-1305) and one (1) dust collector (OR-C-01-DC1205), in series, exhausting to stack OR-C-01-ST1215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCC1, ducted to one (1) dust collector (OR-C-02-DC1105), exhausting to stack OR-C-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDC2, ducted to one (1) cyclone (OR-C-01-CY-2305) and one (1) dust collector (OR-C-01-DC2205), in series, exhausting to stack OR-C-01-ST2215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCC2, ducted to one (1) dust collector (OR-C-02-DC2105), exhausting to stack OR-C-02-ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(k) One (1) Carborec Storage and Blending Area C, identified as CBSBC, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, ducted to a baghouse (OR-C-05-DC1205), exhausting to stack OR-C-05-ST1205.
(2) Six (6) weigh feeders and blend #2 drag conveyors, ducted to a baghouse (OR-C-05-DC1405), exhausting to stack OR-C-05-ST1405.
(3) One (1) Carborec storage silo, ducted to a baghouse (OR-C-05-DC6070), exhausting to stack OR-C-05-ST6070.
(4) One (1) blend #2 surge bin, ducted to a baghouse (OR-C-06-DC1405), exhausting to stack OR-C-06-ST1405.
(5) Three (3) blend #2 weigh feeders, blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, ducted to a baghouse (OR-C-06-DC1205), exhausting to stack OR-C-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

CASP D

(a) Raw Material Receiving Handling and Silos D, identified as RMRHSD, approved for construction in 2010, consisting of the following:

(1) One (1) CDD1 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) baghouse (OR-D-01-DC1105), exhausting to stack OR-D-01-ST1105.
(2) One (1) CDD2 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) dust collector (OR-D-01-DC2105), exhausting to stack OR-D-01-ST2105.
(3) Five (5) dry coal storage silos, ducted to dedicated baghouses (OR-D-02-DC1070, OR-D-02-DC2070, OR-D-02-DC3070, OR-D-02-DC4070, and OR-D-02-DC5070, respectively), exhausting to stacks OR-D-02-ST1070, OR-D-02-ST2070, OR-D-02-ST3070, OR-D-02-ST4070, and OR-D-02-ST5070, respectively.
(4) Five (5) blend #1 weigh feeders and one (1) drag conveyor, ducted to one (1) baghouse (OR-D-03-DC1105), exhausting to stack OR-D-03-ST1105.
(5) Four (4) blend #1 feed hoppers and two (2) blend #1 hopper feed drag conveyors, ducted to one (1) baghouse (OR-D-04-DC1105), exhausting to stack OR-D-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSD facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDD1, ducted to one (1) cyclone (OR-D-01-CY-1305) and one (1) dust collector (OR-D-01-DC1205), in series, exhausting to stack OR-D-01-ST1215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCD1, ducted to one (1) dust collector (OR-D-02-DC1105), exhausting to stack OR-D-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDD2, ducted to one (1) cyclone (OR-D-01-CY-2305) and one (1) dust collector (OR-D-01-DC2205), in series, exhausting to stack OR-D-01-ST2215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCD2, ducted to one (1) dust collector (OR-D-02-DC2105), exhausting to stack OR-D-02-ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(k) One (1) Carborec Storage and Blending Area D, identified as CBSBD, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, ducted to a baghouse (OR-D-05-DC1205), exhausting to stack OR-D-05-ST1205.
(2) Six (6) weigh feeders and blend #2 drag conveyors, ducted to a baghouse (OR-D-05-DC1405), exhausting to stack OR-D-05-ST1405.
(3) One (1) Carborec storage silo, ducted to a baghouse (OR-D-05-DC6070), exhausting to stack OR-D-05-ST6070.
(4) One (1) blend #2 surge bin, ducted to a baghouse (OR-D-06-DC1405), exhausting to stack OR-D-06-ST1405.
(5) Three (3) blend #2 weigh feeders, blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, ducted to a baghouse (OR-D-06-DC1205), exhausting to stack OR-D-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

CASP Coal Receiving and Handling

(a) Phase 1 CASP C and CASP D coal handling, approved for construction in 2010, consisting of the following:

(1) One (1) feed hopper and conveyor No.1 (PHS1-HC1), with emissions uncontrolled.
(2) Two (2) CASP C coal conveyors, identified as PHS1C-C1 and PHS1C-C2, with emissions uncontrolled.
(3) One (1) CASP C coal feed hopper No.2, identified as CASPC-FH2, with hopper receiving emissions uncontrolled.
(4) Two (2) CASP D coal conveyors, identified as PHS1D-C1 and PHS1D-C2, with emissions uncontrolled.
(5) One (1) CASP D coal feed hopper No.2, identified as CASPD-FH2, with hopper receiving emissions uncontrolled.

(b) Phase 2 CASP coal handling, approved for construction in 2010, consisting of the following:

(1) Two (2) CASP coal conveyors, identified as CASP-C1 and CASP-C2, with emissions uncontrolled.
(2) One (1) CASP rotary stacker CASP-RS1, with emissions uncontrolled.
(3) Four (4) CASP coal conveyor feed hoppers, identified as CASPA-FH1, CASPB-FH1, CASPC-FH1, and CASPD-FH1, with emissions uncontrolled.
(4) Two (2) CASP A coal conveyors, identified as CASPA-C1 and CASPA-C2, with emissions uncontrolled.
(5) One (1) CASP A coal feed hopper No.2, identified as CASPA-FH2, with hopper receiving emissions uncontrolled.
(6) Two (2) CASP B coal conveyors, identified as CASPB-C1 and CASPB-C2, with emissions uncontrolled.
(7) One (1) CASP B coal feed hopper No.2, identified as CASPB-FH2, with hopper receiving emissions uncontrolled.

(8) Two (2) CASP C coal conveyors, identified as CASPC-C1 and CASPC-C2, with emissions uncontrolled.
(9) Two (2) CASP D coal conveyors, identified as CASPD-C1 and CASPD-C2, with emissions uncontrolled.

Under 40 CFR 60, Subpart Y, the CASP Raw Material Receiving and Handling facilities are considered coal processing and conveying equipment, and coal storage systems.

(c) Storage Piles

(1) One (1) PHS1 intermediate coal storage pile No. 1.
(2) Four (4) PHS1 coal storage piles.
(3) One (1) PHS1 intermediate coal storage pile No. 2.
(4) Four (4) CASP coal storage piles.

Under 40 CFR 60, Subpart Y, these storage piles are each considered open storage piles.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

H.2.1 General Provisions Relating to New Source Performance Standards [40 CFR Part 60, Subpart A] [326 IAC 12-1]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR Part 60, Subpart Y.

(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

H.2.2 Standards of Performance for Coal Preparation Plants [40 CFR Part 60, Subpart Y] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart Y, the Permittee shall comply with the provisions of the Standard of Performance for Coal Preparation Plants (included as Attachment C of this permit), which are incorporated by reference as 326 IAC 12, as specified as follows:

(1) 40 CFR 60.250 (a) and (d)
(2) 40 CFR 60.251
(3) 40 CFR 60.252 (b)(1)(i), (b)(2)(iii), (b)(3)(iii)
(4) 40 CFR 60.253 (b)
(5) 40 CFR 60.254 (b) and (c)
(6) 40 CFR 60.255 (b) through (f) and (h)
(7) 40 CFR 60.257 (a), (b)(1) through (b)(5)
(8) 40 CFR 60.258 (a)(1) through (6), (b)(3), (c), and (d)

SECTION H.3 FACILITY OPERATION CONDITIONS - NSPS, SUBPART IIII

Facility Description [326 IAC 2-7-5(15)]: Note: Complete Descriptions are shown in Section A.2.

CASP A

(r) Two (2) diesel-fired emergency generators, identified as EGA1 and EGA2, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE.

(s) One (1) natural gas-fired emergency generator, identified as EGA3, , with a maximum rated output of 450 kW. Under 40 CFR 60, Subpart IIII, this is considered an emergency stationary CI ICE.

CASP B

(r) Two (2) diesel-fired emergency generators, identified as EGB1 and EGB2, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE.

(s) One (1) natural gas-fired emergency generator, identified as EGB3, , with a maximum rated output of 450 kW. Under 40 CFR 60, Subpart IIII, this is considered an emergency stationary CI ICE.

CASP C

(r) Two (2) diesel-fired emergency generators, identified as EGC1 and EGC2, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE.

(s) One (1) natural gas-fired emergency generator, identified as EGC3, , with a maximum rated output of 450 kW. Under 40 CFR 60, Subpart IIII, this is considered an emergency stationary CI ICE.

CASP D

(r) Two (2) diesel-fired emergency generators, identified as EGD1 and EGD2, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE.

(s) One (1) natural gas-fired emergency generator, identified as EGD3, , with a maximum rated output of 450 kW. Under 40 CFR 60, Subpart IIII, this is considered an emergency stationary CI ICE.

Insignificant Activities

CASP A

(4) One (1) diesel-fired stationary fire pump, identified as FPA, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 60, Subpart IIII, this is considered a fire pump stationary CI ICE.

CASP B

(4) One (1) diesel-fired stationary fire pump, identified as FPA, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 60, Subpart IIII, this is considered a fire pump stationary CI ICE.

CASP C

(4) One (1) diesel-fired stationary fire pump, identified as FPA, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 60, Subpart IIII, this is considered a fire pump stationary CI ICE.

CASP D

(4) One (1) diesel-fired stationary fire pump, identified as FPA, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 60, Subpart IIII, this is considered a fire pump stationary CI ICE.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

H.3.1 General Provisions Relating to New Source Performance Standards [40 CFR Part 60, Subpart A] [326 IAC 12-1]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR Part 60, Subpart IIII.

(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

H.3.2 Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR Part 60, Subpart IIII] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart IIII, the Permittee shall comply with the provisions of the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (included as Attachment D of this permit), which are incorporated by reference as 326 IAC 12, as specified as follows:

(1) 40 CFR 60.4200 (a)(2)
(2) 40 CFR 60.4205 (b), (c), and (d)
(3) 40 CFR 60.4206
(4) 40 CFR 60.4207 (a) and (b)
(5) 40 CFR 60.4208
(6) 40 CFR 60.4209
(7) 40 CFR 60.4211 (a), (c), (d)(1), (d)(2), and (e)
(8) 40 CFR 60.4213
(9) 40 CFR 60.4214 (b) and (c)

(10) 40 CFR 60.4217
(11) 40 CFR 60.4218
(12) 40 CFR 60.4219
(13) Table 3 to Subpart IIII of Part 60 (as applicable)
(14) Table 4 to Subpart IIII of Part 60 (as applicable)
(15) Table 5 to Subpart IIII of Part 60 (as applicable)
(16) Table 7 to Subpart IIII of Part 60 (as applicable)
(17) Table 8 to Subpart IIII of Part 60 (as applicable)

SECTION H.4 FACILITY OPERATION CONDITIONS - NESHAP, SUBPART ZZZZ

Facility Description [326 IAC 2-7-5(15)]: Note: Complete Descriptions are shown in Section A.2.

CASP A

(r) Two (2) diesel-fired emergency generators, identified as EGA1 and EGA2, each with a maximum rated output of 1650 kW. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(s) One (1) natural gas-fired emergency generator, identified as EGA3, , with a maximum rated output of 450 kW. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

CASP B

(r) Two (2) diesel-fired emergency generators, identified as EGB1 and EGB2, each with a maximum rated output of 1650 kW. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(s) One (1) natural gas-fired emergency generator, identified as EGB3, , with a maximum rated output of 450 kW. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

CASP C

(r) Two (2) diesel-fired emergency generators, identified as EGC1 and EGC2, each with a maximum rated output of 1650 kW. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(s) One (1) natural gas-fired emergency generator, identified as EGC3, , with a maximum rated output of 450 kW. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

CASP D

(r) Two (2) diesel-fired emergency generators, identified as EGD1 and EGD2, each with a maximum rated output of 1650 kW. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(s) One (1) natural gas-fired emergency generator, identified as EGD3, , with a maximum rated output of 450 kW. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

Insignificant Activities

CASP A

(4) One (1) diesel-fired stationary fire pump, identified as FPA, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

CASP B

(4) One (1) diesel-fired stationary fire pump, identified as FPA, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

CASP C

(4) One (1) diesel-fired stationary fire pump, identified as FPA, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

CASP D

(4) One (1) diesel-fired stationary fire pump, identified as FPA, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

H.4.1 National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [40 CFR 63, Subpart ZZZZ] [326 IAC 20-82]

Pursuant to 40 CFR 63, Subpart 63, the Permittee shall comply with the provisions of the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (included as Attachment E of this permit), which are incorporated by reference as 326 IAC 20-82, as specified as follows:

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585 (a) and (b)
(3) 40 CFR 63.6590 (a)(2)(i), (a)(2)(ii), (b)(1), and (c)
(4) 40 CFR 63.6645(h)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

Test Result (specify)_____

Report (specify) _____

Notification (specify) _____

Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Phone:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865

EMERGENCY OCCURRENCE REPORT

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121

This form consists of 2 pages Page 1 of 2

This is an emergency as defined in 326 IAC 2-7-1(12) The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and The Permittee must submit notice in writing or by facsimile within two (**2**) days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance and Enforcement Branch

QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121

Months: _____ to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".	
☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position:_____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

PART 70 OPERATING PERMIT
SEMI-ANNUAL NATURAL GAS FIRED BOILER CERTIFICATION

Source Name:	U.S. Steel - Gary Works
Source Address:	One North Broadway, Gary, IN 46402
Mailing Address:	One North Broadway, Gary, IN 46402
Part 70 Permit No.:	T089-7663-00121
Facility:	

☐ Natural Gas Only ☐ Alternative Fuel Burned From:_____ To:_____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Phone:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Operating Permit Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Facility: No. 3 Sinter Plant Sinter Strand Windbox recirculating burners (ISB001, ISB002, and ISB003)
Parameter: Natural gas usage
Limit: 95.5 million cubic feet (MMCF) per 12-consecutive month period with compliance demonstrated at the end of each month.

QUARTER: _____ YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Permit Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Facility: No. 3 Sinter Plant Sinter Strand Windbox recirculating burners (ISB001, ISB002, and ISB003)
Parameter: Coke oven gas usage
Limit: 1,637.4 million cubic feet (MMCF) per 12-consecutive month period with compliance demonstrated at the end of each month

QUARTER:_____ YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by :_____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Operating Permit Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Facility: South Sheet Mill hydrogen atmosphere batch annealing furnaces
Parameter: NOx
Limit: 37.2 million cubic feet (MMCF) of natural gas per 12 consecutive month period with compliance demonstrated at the end of each month,

YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This month	11 previous months	12 month total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.
☐ Deviation/s occurred in this quarter.

Deviation has been reported on:_____

Submitted by:_____

Title / Position:_____

Signature:_____

Date_____

Phone:_____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR Quality
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Operating Permit Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46402
Mailing Address: One North Broadway, Gary, Indiana 46402
Part 70 Part No.: T089-7663-00121
Facility: Turboblower Boiler House (TBBH) boiler no. 6
Parameter: Natural Gas Usage
Limits: 1,059.7 million cubic feet (MMCF) per 12-consecutive month period with compliance demonstrated at the end of each month.

QUARTER: _____YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This month	11 previous months	12 month total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name:	U.S. Steel - Gary Works
Source Address:	One North Broadway, Gary, IN 46402
Mailing Address:	One North Broadway, Gary, IN 46402
Part 70 Permit No.:	T089-7663-00121
Facility:	Coke oven battery natural gas injection jets (CPNG001, CPNG002, and CPNG003)
Parameter:	Natural gas usage
Limit:	178.7 million cubic feet (MMCF) per 12-consecutive month period with compliance demonstrated at the end of each month.

QUARTER:_____YEAR_____

Month	Column 1	Column 2	Column 1 + Column 2
	This month	11 previous months	12 month total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name:	U.S. Steel - Gary Works
Source Address:	One North Broadway, Gary, IN 46402
Mailing Address:	One North Broadway, Gary, IN 46402
Part 70 Permit No.:	T089-7663-00121
Facility:	Boilers No. through No. 10 and the temporary rental boiler at the coke plant boiler house
Parameter:	Total NOx emissions
Limit:	Less than 64.6 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month

NOx Emissions (tons/month) = (280X + 36Y + 129 Z)/ 2000

Where X = total monthly natural gas usage in boilers No. 1 through No. 8 (MMCF/month)
Y= monthly natural usage in the temporary rental boiler (MMCF/month)
Z = total monthly natural gas usage in boilers No. 9 and 10 (MMCF/month)

QUARTER:_____YEAR_____

Month	Column 1	Column 2	Column 1 + Column 2
	This month	11 previous months	12 month total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name:	U.S. Steel - Gary Works
Source Address:	One North Broadway, Gary, IN 46402
Mailing Address:	One North Broadway, Gary, IN 46402
Part 70 Permit No.:	T089-7663-00121
Facility:	Boilers No. 1 through No.10 and the temporary rental boiler at the coke plant boiler house
Parameter:	Total Natural gas usage
Limit:	Less than 2,550 MMCF per 12-consecutive month period with compliance demonstrated at the end of each month.

QUARTER:_____YEAR_____

Month	Column 1	Column 2	Column 1 + Column 2
	This month	11 previous months	12 month total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR Quality
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, Indiana 46406
Mailing Address: One North Broadway, Gary, Indiana 46406
Part 70 Permit No.: T089-7663-00121
Facility: Granulation plant
Parameter: granule process rate
Limit:: 1,704,000 tons per 12 consecutive month period with compliance demonstrated at the end of each month

Year:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviations occurred in this quarter.

Deviation has been reported on:_____

Submitted by: _____

Title / Position _____

Signature _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Facility: Air Preheaters 1, 2 and 3 combined (former Gary Coal Processing, LP)
Parameter: Natural gas usage
Limit: Natural gas usage of 549 MMcf per 12 consecutive month period with compliance demonstrated at the end of each month and less than 183 MMcf per month.

YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviations occurred in this quarter.

Deviation has been reported on:_____

Submitted by: _____

Title/Position:_____

Signature: _____

Date: _____

Phone_____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Facility: Railcar Heater - Thaw shed (former Gary Coal Processing, LP)
Parameter: Natural gas usage
Limit: Natural gas usage of 12.504 MMcft per 12 consecutive month period with compliance demonstrated at the end of each month and less than 5 MMcft per month.

YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.

Deviation has been reported on:

Submitted by: _____

Title/Position:_____

Signature: _____

Date: _____

Phone_____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Parameter: Coal input
Limit: The input of coal to each of the following facilities shall be less than 750,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month:

- HS1 intermediate storage pile #1
- phase 1 coal piles (4 piles)
- CASP C/D hopper feeder & conveyor (PHS1-HC1)
- PHS1 intermediate storage pile #2.

FACILITY:_____ QUARTER: _____ YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Parameter: Coal input
Limit: The input of coal to each of the following facilities shall be less than 375,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month:

CASP A - feed hopper (CASPA-FH1), CASP A Conv. #1 (CASPA-C1), CASP A Conv. #2 (CASPA-C2), CASP A coal feed hopper (CASPA-FH2), CASP B - feed hopper (CASPB-FH1), CASP B Conv. #1 (CASPB-C1), CASP B Conv. #2 (CASPB-C2), CASP B coal feed hopper (CASPB-FH2), CASP C coal feed hopper No.2 (CASPC-FH2), CASP D coal feed hopper No.2 (CASPD-FH2), CASP C coal feed conveyor (PHS1C-C1), CASP C coal feed conveyor (PHS1C-C2), CASP D coal conveyor (PHS1D-C1), CASP D coal conveyor (PHS1D-C2), CASP C - coal feed hopper No.1 (CASPC-FH1), CASP C coal conveyor (CASPC-C1), CASP C coal conveyor (CASPC-C2), CASP D - coal feed hopper No.1 (CASPD-FH1), CASP D coal conveyor (CASPD-C1), CASP D coal conveyor (CASPD-C2)

FACILITY:_____ QUARTER: _____ YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Parameter: Coal input
Limit: The amount of coal handled by the Phase 1 CASP C/D Coal Feed Path facilities (PHS1 intermediate storage pile #1, phase 1 coal piles, PHS1-HC1, PHS1 intermediate storage pile #2) and the Phase 2 CASP A/B/C/D Coal Feed Path facilities (CASP-C1, CASP-C2, CASP-RS1, and CASP coal storage piles) shall be less than 1,500,000 tons per twelve consecutive month period with compliance determined at the end of each month.

FACILITY:_____ QUARTER: _____ YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Parameter: Coal input
Limit: The amount of coal handled by the Phase 1 CASP C Coal Feed Path facilities (PHS1C-C1 and PHS1C-C2) and the Phase 2 CASP C Coal Feed Path facilities (CASPC-FH1, CASPC-C1, and CASPC-C2) shall be less than 375,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

FACILITY:_____ QUARTER: _____ YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Parameter: Cokonyx input
Limit: The amount of coal handled by the Phase 1 CASP D Coal Feed Path facilities (PHS1D-C1 and PHS1D-C2)and the Phase 2 CASP D Coal Feed Path facilities (CASPD-FH1, CASPD-C1, and CASPD-C2) shall be less than 375,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

FACILITY:_____ QUARTER: _____ YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Parameter: Billets and Billet Fines input
Limit: The input of billets and billet fines to each of the following facilities shall be less than 50,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month:

CASP A billet fines hopper (OR-A-06-HP1125), CASP A billet fine conveyor (OR-A-06-CB1130), CASP A billet fine conveyor (OR-A-06-CB1140), CASP A billet fine conveyor (OR-A-06-CB1145), CASP B billet fines hopper (OR-B-06-HP1125), CASP B billet fine conveyor (OR-B-06-CB1130), CASP B billet fine conveyor (OR-B-06-CB1140), CASP B billet fine conveyor (OR-B-06-CB1145), CASP C billet fines hopper (OR-C-06-HP1125), CASP C billet fine conveyor (OR-C-06-CB1130), CASP C billet fine conveyor (OR-C-06-CB1140), CASP C billet fine conveyor (OR-C-06-CB1145), CASP D billet fines hopper (OR-D-06-HP1125), CASP D billet fine conveyor (OR-D-06-CB1130), CASP D billet fine conveyor (OR-D-06-CB1140), CASP D billet fine conveyor (OR-D-06-CB1145)

FACILITY:_____ QUARTER: _____ YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Parameter: Billets and Billet Fines input
Limit: The input of billets and billet fines to each of the following facilities shall be less than 375,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month:

CASP A billet drag conveyer (OR-A-06-CD1110), CASP A billet hopper (OR-A-06-HP1115), CASP A billet hopper (OR-A-06-HP1135), CASP A billet drag conveyor (OR-A-06-CD1150), CASP A billet drag conveyor (OR-A-06-CD1160), CASP A billet drag conveyor (OR-A-06-CD1170), CASP A billet drag conveyor (OR-A-06-CD1180), CASP A billet drag conveyor (OR-A-06-CD1190), CASP B billet drag conveyer (OR-B-06-CD1110), CASP B billet hopper (OR-B-06-HP1115), CASP B billet hopper (OR-B-06-HP1135), CASP B billet drag conveyor (OR-B-06-CD1150), CASP B billet drag conveyor (OR-B-06-CD1160), CASP B billet drag conveyor (OR-B-06-CD1170), CASP B billet drag conveyor (OR-B-06-CD1180), CASP B billet drag conveyor (OR-B-06-CD1190), CASP C billet drag conveyer (OR-C-06-CD1110), CASP C billet hopper (OR-C-06-HP1115), CASP C billet hopper (OR-C-06-HP1135), CASP C billet drag conveyor (OR-C-06-CD1150), CASP A billet drag conveyor (OR-C-06-CD1160), CASP C billet drag conveyor (OR-C-06-CD1170), CASP C billet drag conveyor (OR-C-06-CD1180), CASP C billet drag conveyor (OR-C-06-CD1190), CASP D billet drag conveyer (OR-D-06-CD1110), CASP D billet hopper (OR-DA-06-HP1115), CASP D billet hopper (OR-D-06-HP1135), CASP D billet drag conveyor (OR-D-06-CD1150), CASP D billet drag conveyor (OR-D-06-CD1160), CASP D billet drag conveyor (OR-D-06-CD1170), CASP D billet drag conveyor (OR-D-06-CD1180), CASP D billet drag conveyor (OR-D-06-CD1190)

FACILITY:_____ QUARTER: _____ YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Parameter: Billets and Billet Fines input
Limit: The input of billets and billet fines to each of the following combinations of facilities shall be less than 375,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month:

CASP A billet belt conveyors OR-A-06-CB1120 and OR-A-06-CB1126, CASP A billet belt conveyors OR-A-06-CB2120 and OR-A-06-CB2126, CASP A billet vibratory feeders OR-A-06-VF1125 and OR-A-06-VF2126, CASP A trolley loading pans (collectively identified as OR-A-09-LD-1128), CASP A trolley cars (collectively identified as OR-A-09-LD-1128), CASP B billet belt conveyors OR-B-06-CB1120 and OR-B-06-CB1126, CASP B billet belt conveyors OR-B-06-CB2120 and OR-B-06-CB2126, CASP B billet vibratory feeders OR-B-06-VF1125 and OR-A-06-VF2126, CASP B trolley loading pans (collectively identified as OR-B-09-LD-1128), CASP B trolley cars (collectively identified as OR-A-09-LD-1128), CASP C billet belt conveyors OR-C-06-CB1120 and OR-C-06-CB1126, CASP A billet belt conveyors OR-C-06-CB2120 and OR-C-06-CB2126, CASP C billet vibratory feeders OR-C-06-VF1125 and OR-C-06-VF2126, CASP C trolley loading pans (collectively identified as OR-C-09-LD-1128), CASP C trolley cars (collectively identified as OR-C-09-LD-1128), CASP D billet belt conveyors OR-D-06-CB1120 and OR-D-06-CB1126, CASP D billet belt conveyors OR-D-06-CB2120 and OR-D-06-CB2126, CASP D billet vibratory feeders OR-D-06-VF1125 and OR-D-06-VF2126, CASP D trolley loading pans (collectively identified as OR-D-09-LD-1128), CASP D trolley cars (collectively identified as OR-D-09-LD-1128)

FACILITY:_____ QUARTER: _____ YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Parameter: Cokonyx input
Limit: The input of Cokonyx to each of the following combinations of facilities shall be less than 300,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month:

CASP A Cokonyx belt conveyors OR-A-08-CB1020 and OR-A-08-CB1030, CASP A Cokonyx belt conveyors OR-A-08-CB2020 and OR-A-08-CB2030,
CASP B Cokonyx belt conveyors OR-B-08-CB1020 and OR-B-08-CB1030, CASP B Cokonyx belt conveyors OR-B-08-CB2020 and OR-B-08-CB2030, CASP C Cokonyx belt conveyors OR-C-08-CB1020 and OR-C-08-CB1030, CASP C Cokonyx belt conveyors OR-C-08-CB2020 and OR-C-08-CB2030, CASP D Cokonyx belt conveyors OR-D-08-CB1020 and OR-D-08-CB1030, CASP D Cokonyx belt conveyors OR-D-08-CB2020 and OR-D-08-CB2030, CASP A vibratory feeders CASPA-VF1 and CASPA-VF2, CASP A emergency bypass bunkers CASPA-EB1 and CASPA-EB2, CASP A Cokonyx conveyors CKNXC-A1 and CKNXC-A2, CASP B vibratory feeders CASPB-VF1 and CASPB-VF2, CASP B emergency bypass bunkers CASPB-EB1 and CASPB-EB2, CASP B Cokonyx conveyors CKNXC-B1 and CKNXC-B2, CASP C vibratory feeders CASPC-VF1 and CASPC-VF2, CASP C emergency bypass bunkers CASPC-EB1 and CASPC-EB2, CASP C Cokonyx conveyors CKNXC-C1 and CKNXC-C2, CASP D vibratory feeders CASPD-VF1 and CASPD-VF2, CASP D emergency bypass bunkers CASPD-EB1 and CASPD-EB2, CASP D Cokonyx conveyors CKNXC-D1 and CKNXC-D2

FACILITY:_____ QUARTER: _____ YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Parameter: Cokonyx input
Limit: The input of Cokonyx to each of the following facilities shall be less than 600,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month:

CASP A/B Emergency Storage Pile, CASP A & B - Cokonyx conveyor (CKNXC-A/B), CASP A & B - Cokonyx storage bins (CKNXBin-A/B), CASP C/D Emergency Storage Pile, CASP C & D - Cokonyx conveyor (CKNXC-C/D), CASP C & D- Cokonyx storage bins (CKNXBin-C/D)

FACILITY:_____ QUARTER: _____ YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Parameter: Cokonyx input
Limit: The input of Cokonyx to the Cokonyx loadout railcar shall be less than 1,200,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month:

FACILITY:_____ QUARTER: _____ YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attachment A to
Part 70 Operating Permit No. 089-7663-00121

TABLE OF CONTENTS

1.0 Introduction 1
2.0 Description of Facilities 3
3.0 Identification of Facilities 4
3.1 Paved Roadways and Parking Lots 4
3.2 Unpaved Roadways and Parking Lots 4
3.3 Storage Piles 4
3.4 Other Material Handling Facilities 4
3.4.1 Blast Furnace Dustcatchers 4
3.4.2 Revert Coal and Coke Screening 5
3.4.3 Coal and Coke Handling 5
3.4.4 Destock Coke Screening 3
3.4.5 Raw Material Handling at the Sinter Plant 5
3.4.6 Ore Unloading 5
3.4.7 Mill Scale Recycling 6
3.4.8 B-Mix and B-Scrap Recycling 6
3.4.9 Unloading Burnt Lime and Dolomite 6
3.4.10 Baghouse Dust Disposal 6
3.4.11 Alloy Control 6
4.0 Control Measures 6
4.1 Paved Roadway Cleaning 6
4.2 Paved Parking Area Cleaning 6
4.3 Unpaved Roadway Treatment 6
4.4 Exposed Area Treatment 6
4.5 Material Storage Area Treatment 6
4.5.1 Sinter Plant Storage Pile Area 6
4.5.2 Coal Stockpile Delivery Management 6
4.5.3 Coal Storage Pile Areas 6
4.5.4 Coke Loading Station Transfers 6
4.6 Material Transfer and Inplant Transportation Control 6
4.6.1 Vehicle Speed Control 6
4.6.2 Inplant Transportation 6
4.7 Other control Measures 6
5.0 Conditions Preventing Use of Control Measures 6
5.1 Conditions for Paved Roads 6
5.2 Conditions for Unpaved Roadways and Areas and Storage Piles 6
6.0 Schedule for Achieving Compliance 6
6.1 Road Paving Program 6
6.2 Road Cleaning Program 6
6.3 Storage Pile, Material Handling and Transfer, and Exposed Area Treatment 6
6.4 Other Fugitive Dust Control Activities 6
7.0 Record Keeping and Reporting 6
7.1 Drawings Showing Controlled Emission Sources 6
7.2 Records of Water or Chemical Applications 6
7.3 Records of Eliminated or Delayed Treatments 6
7.4 Maintenance of Records 6
7.5 Quarterly Reports 6
7.6 Changing of Control Plan 6
8.0 Fugitive Emission Monitoring Program 6
8.1 Silt Sampling of Paved Road 6
8.2 Opacity Monitoring of Fugitive Emission Sources 6

1.0 INTRODUCTION

On May 12, 1993, The Indiana Department of Environmental Management (IDEM) promulgated rule 326 IAC 6-1-11.1, Lake County Fugitive Particulate Matter Control Requirements, placing it into effect 30 days later. This rule requires that affected sources submit a fugitive particulate control plan to reduce emissions of PM-10 (particulate matter with an aerodynamic diameter of 10 microns or less) from nontraditional sources of fugitive emissions. This plan must include a description of each nontraditional source, measurements of the parameters needed to estimate emissions from these sources, control measures and other work practices to be employed to limit PM-10 emissions from these sources, and conditions (i.e. rain, snow, high wind speeds, freezing conditions, etc.) that may prevent or delay routine implementation of some control measures.

In response to these regulations, Gary Works conducted field programs to quantify emissions of PM-10 generated by vehicular traffic on plant roadways, material handling and transfer activities, wind erosion of storage piles and open areas, and vehicular traffic entering and exiting parking lots. In order to quantify these emissions, samples of the particulate in parking lots and roadways were collected. Storage piles and open areas were also sampled. The opacity of PM-10 emissions from these nontraditional sources were also observed and recorded using the procedures set forth in 326 IAC 6-1-11.1. Gary Works recently updated the original survey. Roadways, storage piles, material transfer and handling activities, parking lots and exposed areas under the control of private contractors were not included in this study. The results of this survey and the quantification of nontraditional sources of fugitive emissions are presented in Figure 1. The background data used to estimate these emissions can be found in Appendix A**.**

The following sections contain the plan developed to control nontraditional fugitive particulate emissions at USS Gary Works. This plan updates the original plan submitted in 1993 and will be executed under the supervision of the USS Environmental Control Division, Gary Works, One North Broadway, Mail Station 70, Gary, Indiana 46402. Telephone number (219) 888-2339. This plan will be implemented on a year round basis except, when not required to do so under Section 5.0 – Conditions Preventing Use of Control Measures.

Areas of USS Gary Works which are under the control of independent contractors and companies will have separate particulate control plans and are not covered within the context of this particulate control plan. These contractors fall under 326 IAC 6-1-11.1 paragraph (a) (4). top↑

2.0 DESCRIPTION OF FACILITIES

USS Gary Works is a fully integrated steelmaking facility located on the southern shore of Lake Michigan in Gary, Indiana. The plant occupies an area approximately seven miles long and more than a mile wide. Landfill areas occupy the extreme eastern end of the plant property. The Coke Plant and Sinter Plant are also located east of the Slip with the remainder of the Plant west of the slip. Roadways, storage piles, and most of the material handling operations that are the responsibility of Gary Works are identified in this plan. The blast furnace dustcatcher, coke

screening, coal handling, raw material handling at the sinter plant, ore unloading, alloy control and other operations are described in paragraphs 3.3.1 through 3.3.11. top↑

3.0 IDENTIFICATION OF FACILITIES

3.1 Paved Roadways and Parking Lots

Drawings GW468068 and GW468069 show the locations of the existing paved roads and parking lots at USS Gary Works. Paved roadways and parking lots that require control measures specified by this plan are identified on these drawings.

3.2 Unpaved Roadways and Open Areas

Drawings GW468070 and GW468071 show the locations of existing unpaved roads and open areas at USS Gary Works. Unpaved roads and open areas that require control measures specified by this plan are identified on these drawings.

3.3 Storage Piles

The approximate locations of the various storage piles are identified on Gary Works drawings GW487814 and GW487815. Because of the transient nature of these storage piles, the exact pile locations may change but the general storage pile areas will remain the same. Load-in, load-out and screening operations are also transient and take place throughout the area.

3.4 Other Material Handling Facilities

The majority of material handling activities that have the potential to generate fugitive particulate are performed by outside contractors. Plant contractor locations and associated activities are identified on Gary Works drawings GW487814 and GW487815. Control of these emissions is the responsibility of the individual contractor and these activities are not included in this control plan. Material handling activities performed by USS are also identified on these drawings and are described below. Figure 2 lists USS material processing facilities and their associated control equipment as specified in 326 IAC 6-1-11.1. A general material process flow diagram can be found in Figure 3.

3.4.1 Blast Furnace Dustcatchers

The blast furnace dustcatchers are unloaded into trucks and hauled to the sinter plant storage area. Occasionally a truck may not be available and the content of the dustcatcher is discharged to the ground and a front-end loader transfers this material to the truck. Because the contents of the dustcatchers for blast furnaces 4, 6, and 8 are wetted in a slurry device with water and steam prior to discharge, emissions are normally negligible. If the dust binds in the dustcatcher and plugs the discharge port, significant emissions may result because the material is not thoroughly wetted in the slurry device.

The No. 13 blast furnace dust catcher unloads automatically on a regular cycle throughout the day. The dust is discharged from an intermediate chamber, which is sealed off from the dust catcher, therefore, the dust falls by gravity to a truck or to the ground and fugitive emissions are not significant. Front-end loaders are used to load material to trucks if on the ground.

3.4.2 Revert Coal & Coke Screening

The coal and coke screening operation sizes undersize material into three or more products. These screened products are recycled or sold. Except for periods when the wind speed is very high, no visible emissions are generated.

3.4.3 Coal and Coke Handling

Coal is transported to the plant by rail. Rail cars are unloaded to hoppers and then the coal is transported by covered conveyors to the coal handling facility where it is pulverized and blended. The blended coal is transferred by covered conveyor to the No. 5 and 7 coke batteries (wet-charged) or to the precarbon facilities and then to the No. 2 and 3 batteries.

After the coking process is completed, the coke is pushed into a quench car and transported to the quench tower. The quenched coke is then transferred to the coke wharf where further cooling takes place. The cooled coke slides down the sloped wharf onto a covered belt conveyor system where it is transferred to one of the three coke loading stations (2 & 3 loading station, No. 5 loading station and No. 6 loading station). The unscreened coke is transported by rail to the blast furnaces where it is unloaded, screened and subsequently charged to the blast furnaces.

3.4.4 Destock Coke Screening

Excess production or purchased coke is staged in a storage area at the east end of the plant. This coke is screened for size prior to use at the blast furnaces. A contractor currently performs this screening activity. Material not suitable for use is recycled or sold.

3.4.5 Raw Material Handling at the Sinter Plant

Waste and raw materials are transferred by truck from various areas of the plant to the Sinter Plant storage pile area. These materials are unloaded from the trucks onto specific storage piles. The material in these storage piles is then loaded into trucks by use of front-end loaders and transferred to one of the blending areas. The material is blended and then loaded into trucks and taken to the sinter plant where it is screened and loaded onto a conveyor. The conveyor transfers the screened material to the Sinter Plant storage bins where it is then fed to the sinter machines. The sinter product is transported by conveyor belt from the sinter plant to the highline sinter load-out bins. Transfer cars deposit the sinter into the appropriate blast furnace bins along the highline. Sinter is then drawn from the highline bins into a stockhouse scale car and then deposited into the blast furnace skips.

3.4.6 Ore Unloading

Pellets are received by bulk carriers and are transferred to a belt conveyor by self-unloaders. Pellets are transferred to a stockpile in the West Ore Yard by a conveyor-stacker or by ore bridge. The material is then handled by ore bridge and/or conveyor and deposited at the North or South pellet screening station. The screened pellets are fed by conveyor into the stockhouse of the No. 13 Blast Furnace.

Screened pellets from the south screening station are transported by conveyor to the blast furnace highline load-out bin. Transfer cars transport the pellets from the load-out bin to the appropriate

blast furnace bins. The pellets are then drawn from the highline bins into a stockhouse scale car where they are weighed before being deposited into the blast furnace skips.

3.4.7 Mill Scale Recycling

Mill scale is transferred by truck from the 84-inch Hot Strip Mill and the continuous casters to the sinter plant storage area. This material is wet and is unloaded into storage piles prior to being transferred to the blending area.

3.4.8 B-Mix and B-Scrap Recycling

B-Mix and B-Scrap are processed by slag contractors at several locations in the plant. The material is screened, loaded into trucks and transported to the north and south ends of the West Ore Yard on an alternating sequence. The material is then handled by ore bridge and deposited into highline transfer cars. The transfer cars transport the B-Mix or B-Scrap to the appropriate blast furnace highline bins. The material is then drawn from the highline bins into a stockhouse scale car and deposited into the blast furnace skips.

3.4.9 Unloading Burnt Lime and Dolomite

Burnt lime for the No. 1 BOP Shop is unloaded from rail cars at the flux unloading station east of the shop. The railcar is positioned over an underground storage bin and the lime is discharged from the hopper beneath the car into the storage bin. The burnt lime is transferred from the storage bin by covered conveyor to the highline storage bins inside the BOP Shop. The lime is then drawn from the storage bins into the furnace hopper.

Pulverized lime and pebble sized dolomite are both used as fluxing agents at the No. 2 Q-BOP. Pulverized lime is delivered to the flux unloading station south of the Q-BOP in railroad cars. The lime is unloaded through hoppers at the bottom of the cars by introducing low-pressure air into the hoppers so that the lime is fluidized and flows freely into an underground storage bin. The lime is then transferred pneumatically via a 12-inch steel pipe from the bottom of the storage bin to the day storage tank. The day storage tank is located north of the unloading building and holds enough lime to supply the Q-BOP Shop for one day. The lime is again transferred pneumatically from the day tank to three intermediate bins inside the Q-BOP Shop. The lime in the intermediate bins is transferred to the weigh tank by a short air slide. The powdered lime leaving the weigh tank is injected with oxygen through the tuyeres.

Dolomite is unloaded from rail cars or trucks into underground bins at the unloading house. A conveyor that starts 20-feet underground moves the dolomite to the Q-BOP transfer tower and another conveyor transfers the material to the flux floor. From the flux floor another conveyor moves the dolomite to the inside storage bins. The dolomite is then drawn from the bins to the weigh hoppers.

3.4.10 Baghouse Dust Disposal

Particulate from the many baghouses located at the Gary Works are trucked to the appropriate facility for recycle, disposal onsite or offsite. Figure 2 identifies the plant dust control equipment and the disposition of the collected particulate.

3.4.11 Alloy Control

Alloys used for additions during steel making are screened and stored in small piles prior to use. These alloys are loaded by front-end loaders into trucks and transported to the appropriate facility. top↑

4.0 CONTROL MEASURES

4.1 Paved Roadway Cleaning

Paved roadways within USS Gary Works will be cleaned by using high pressure water flushing and/or vacuum sweeping. The planned cleaning frequency of each paved road segment along with the segment length is listed in Table 1. This frequency may be temporarily or permanently modified if the emissions limitation specified in 326 IAC 6-1-11.1 is exceeded and/or the road silt loading is excessive. Gary Works drawings nos. GW468068 & GW468069 identify paved roadways that require control measures in the plant.

4.2 Paved Parking Area Cleaning

Paved parking areas may be high pressure water flushed and/or vacuum swept to prevent visible particulate emissions from vehicular traffic. Identified lots will be cleaned on as needed basis determined by an opacity-based mechanism where parking areas will be monitored using procedures described in 326 IAC 6-1-11.1. The paved parking areas eligible for control measures are listed in Table 2. Gary Works drawings nos. GW468068 & GW468069 identify lot locations in the plant.

4.3 Unpaved Roadway Treatment

All unpaved roadways listed below in Table 3 are identified on Gary works drawings GW468070 & GW468071 and will be treated with a commercially produced chemical dust suppressant specifically manufactured for that purpose. Application rates and frequencies will be consistent with the manufacturers recommendations to achieve the degree of control required to meet the applicable emission limitation. At times, recommended application rates may be too high to be absorbed by the roadway in one step. In that case, application will be adjusted in dust suppressant concentration and frequency to ensure proper control of particulate emissions per 326 IAC 6-1-11.1. As an alternative USS may pave previously unpaved road sections and apply paved road cleaning measures to these newly paved roads at frequencies consistent with the existing paved roads in the immediate area.

Gary Works currently uses an asphalt based emulsion dust suppressant to control particulate emissions from unpaved roadways. A material data safety sheet (MSDS) for the current dust suppressant can be found in Appendix B. The minimum application frequencies are shown in Table 4. Note: Contractors are responsible for the treatment of roadways under their control.

4.4 Exposed Area Treatment

Unpaved open areas without roadway designations may require treatment to reduce windblown emissions or to prevent visible emissions from vehicular traffic that utilize these areas. Gary Works will commit to the opacity-based mechanism of the average instantaneous opacity of 10%

as described in 326 IAC 6-1-11.1. Application of dust suppressant chemical will be done at a frequency and application rate to effectively control fugitive dust to the above stated opacity limitation. Table 5 lists unpaved open areas currently controlled by chemical dust suppressants at Gary Works and drawings nos. GW468070 and GW468071 show their locations. In addition to chemical treatment, selected open areas have been seeded with vegetation to inhibit the generation of fugitive dust. Current plans are to continue vegetating areas to prevent dust generation in open areas. Note: Contractors are responsible for the treatment of unpaved open areas under their control.

4.5 Material Storage Area Treatment

4.5.1 Sinter Plant Storage Pile Area

Measures to control fugitive emissions generated by mechanical disturbance and wind erosion of the storage piles in the sinter plant area are limited to water spraying, because by specification, hydrocarbon compounds like those contained in the dust suppressant chemicals are strictly limited in the burden materials. This area will be routinely sprayed with water at a rate and frequency necessary to achieve compliance with the applicable emissions limitation.

4.5.2 Coal Stockpile and Delivery Management

Coal stockpile management focuses on the reduction of inventory and land used for coal storage. Coal deliveries are scheduled to maximize availability to utilize coal directly as efficiently as possible. Adherence to shipping schedule is a priority for all concerned parties involved including coal suppliers, railroads and USS.

4.5.3 Coal Storage Pile Areas

A dust suppressant will be applied to coal storage piles, April through November, on an as needed basis to meet the opacity limitation specified in 326 IAC 6-1-11.1. The material safety data sheet for the currently used dust suppressant can be found in Appendix B.

4.5.4 Coke Loading Station Transfers

Coke is transferred to the blast furnaces via three loading stations located at the coke plant. A dust suppressant will be applied at these loading stations should this material transfer activity generate excessive fugitive particulate emissions as specified in 326 IAC 6-1-11.1. The material safety data sheet for the currently used dust suppressant can be found in Appendix B.

4.6 Material Transfer and Inplant Transportation Control

4.6.1 Vehicle Speed Control

All plant roads shall have posted 20 mph speed limits with a few exceptions dependent upon location and utilization. Enforcement of these posted speed limits shall be the responsibility of the various plant security forces who will employ security vehicles and radar.

4.6.2 Inplant Transportation

Inplant transportation of material by truck will be carried out in such a manner that meets the opacity standard found in 326 IAC 6-1-11.1 (d)(6). Material transported by rail or trucks that generate visible particulate emissions will be covered to meet the applicable emission limit.

4.7 Other control Measures

Gary Works has a program to evaluate and improve paved and unpaved roads on an as needed basis when funds are available.

Vacuum sweeping or flushing on paved roads will continue and the unpaved shoulders of the more heavily traveled roads will be treated with a dust suppressant.

The use of open areas as roadways creates a dust problem because vehicles may veer off paved roads to travel on exposed open areas and can track dust onto paved road surfaces. In addition, in some parts of the plant, vehicles can travel in and out of material processing areas although alternate routes can be taken. In order to limit the use of open areas as roadways and reduce the volume of traffic in material processing areas, signs and concrete barriers may be used to redirect traffic at selected locations. The placement of signs and concrete barriers will be coordinated with knowledgeable plant personnel. After the signs and barriers are in place, additional traffic control measures will be evaluated that will further limit the generation of fugitive dust.

As an alternative to eliminate treatment, selected exposed areas may be seeded with an appropriate ground cover to limit or eliminate the generation of fugitive particulate. The type of ground cover to be established will be appropriate to the soil and climatic conditions at the Gary Works, and will be self-sustaining. top↑

5.0 CONDITIONS PREVENTING USE OF CONTROL MEASURES

Under the following set of conditions, USS Gary Works will not perform the control measures as listed above.

5.1 Conditions for Paved Roads

The cleaning of paved road segments may be delayed when:

- It is raining or snowing at the time of the scheduled cleaning.
- Rain of 0.1 or more inches or 0.5 inches or more of snow has accumulated during the 24-hour period prior to the scheduled cleaning.
- The temperature is below 32ºF at the scheduled time of cleaning, use of high pressure water flushing will be discontinued due to the potential for ice buildup on roadways.
- The road segment is closed or abandoned. Abandoned roads will be barricaded to prevent vehicle access.

- Treatment is not required because the roadway meets the opacity limitation specified in 326 IAC 6-1-11.1.

In the event that consecutive rain or snow days create a condition where a severe backlog of road segments to be cleaned exists, USS will make a reasonable effort to eliminate this backlog as soon as conditions permit.

5.2 Conditions for Unpaved Roadways and Areas and Storage Piles

The treating of unpaved road segments, unpaved areas, or storage piles may be delayed when:

- It is raining or snowing at the time of the scheduled treatment.
- Greater than 0.1 inches of rain or 0.5 inches of snow has accumulated during the 24-hour period prior to the scheduled treatment.
- Road segments, areas, or piles are saturated with water such that chemical dust suppressants cannot be accepted by the surface.
- Road segments, areas, or piles are frozen or covered by ice, snow or standing water.
- The road segment or area is closed or abandoned. Abandoned roads will be barricaded.
- Treatment is not required because the unpaved road or open area meets the opacity limitation specified in 326 IAC 6-1-11.1.
- Sustained wind speeds are excessive.

The treatment of exposed areas and storage piles may be temporarily suspended during periods when excessive wind speeds would result in ineffective or wasteful chemical use. top↑

6.0 SCHEDULE FOR ACHIEVING COMPLIANCE

6.1 Road Paving Program

Road paving and repairing is an ongoing program at the plant. It is expected that the paving of unpaved roads, and paved roads in poor condition, will continue.

6.2 Road Cleaning Program

The road cleaning program was implemented on January 1, 1994, and continues.

6.3 Storage Pile, Material Handling & Transfer, and Exposed Area Treatment

The treatment of storage piles, material handling and transfer activities, and exposed areas was implemented on January 1, 1994, and continues.

6.4 Other Fugitive Dust Control Activities

Other fugitive dust control measures as described in Section 4.7 will continue. top↑

7.0 RECORD KEEPING AND REPORTING

7.1 Drawings Showing Controlled Emission Sources

The drawings showing the locations of the controlled roadways, parking lots, storage piles, open areas, and material handling will be kept in the Environmental Control Division Office. Drawings will also be maintained showing the locations of all areas under the control of outside contractors at USS Gary Works.

7.2 Records of Water or Chemical Applications

Records will be kept on file of all sweeping and flushing and chemical treatments that are performed on the fugitive dust sources covered by this control plan. These forms will be kept in the Environmental Compliance, Energy and Environmental Control Division Office. The following information will be contained on the form:

- The name and location of the roadway, area, or pile controlled.
- The application rate.
- The time of each application.
- The area covered by each application.
- Identification of each method of application.
- The total quantity of water or chemical used for each application.
- For each application of chemical solution, the concentration and identity of the chemical.

If special physical or chemical treatment occurs on an area or facility within the plant as specified in 326 IAC 6-1-11.1 part (e), paragraph (4)(C), the following information will be provided in the log:

- The name of the physical or chemical agent used.
- The location of the application,
- The application rate.
- The total quantity of agent used.
- If the agent was diluted, the percent of concentration.

7.3 Records of Eliminated or Delayed Treatments

A log will be maintained for the reporting of incidents that prevent the application of control measures. For each incident, the date along with a specific explanation as to why the control

measures were not implemented will be provided. This notation should also include any necessary corrective action to be taken.

7.4 Maintenance of Records

A section will be established within the Environmental Control Division Office for the Storage of five (5) years of records pertaining to fugitive particulate control measures. Copies of all records required will be submitted to IDEM within twenty (20) working days upon written request. These records will be available for inspection and copying by IDEM department representatives during normal working hours.

7.5 Quarterly Reports

A quarterly report will be submitted by the Environmental Control Division Office containing the following information:

- The dates on which any of the required control measures were not implemented.
- A listing of the above control measures.
- The reasons that the control measures were not implemented.
- Any corrective action taken, that may be necessary.

This report will be submitted to the IDEM within 30 calendar days after the end of the quarter. The quarters end on March 31, June 30, September 30, and December 31.

7.6 Changing of Control Plan

The plan administrator will review and update the plan as necessary based on the annual review. A copy of the revised plan will be provided to IDEM upon request. The plan will also be revised if IDEM determines that the requirements of the control plan have not been met. Changes to the control plan will be added to or subtracted from the plan maps in order to keep information current. New maps incorporating the annual changes will be developed on a five year cycle.

8.0 FUGITIVE EMISSION MONITORING PROGRAM

8.1 Silt Sampling of Paved Road

If requested by IDEM, USS Gary Works will provide representative silt loading measurements for a maximum of ten paved roads per month during the months of April through November. Silt loadings will be measured in accordance with the procedures provided in the Rule. IDEM will have the right to specify the road segments to be sampled.

8.2 Opacity Monitoring of Fugitive Emission Sources

A visible emission based mechanism as described in 326 IAC 6-1-11.1 (d)(1-9) will be used to determine the effectiveness of this treatment program. Opacity readings will be taken one day per month of paved and unpaved roads, parking lots, material handling, processing, transfer activities, wind erosion of storage piles and exposed areas during the months of April through

November. Opacity readings will help to determine the effectiveness of the program and identify areas where corrective action may be necessary to maintain compliance. top↑

LIST OF DRAWINGS

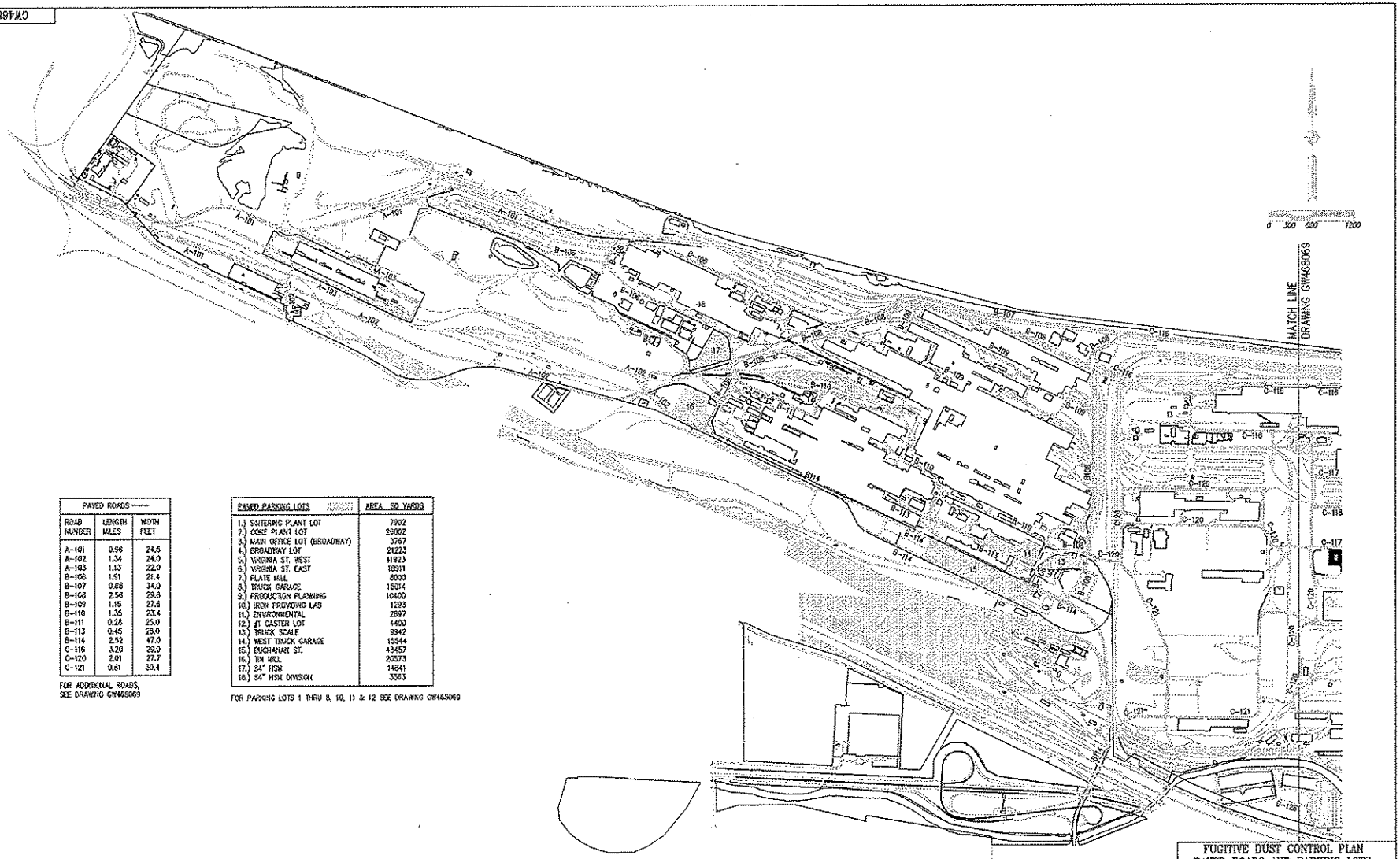
GW468068 - Paved Roadways and Paved Parking Lots (West)
GW468069 - Paved Roadways and Paved Parking Lots (East)
GW468070 - Unpaved Roadways and Open Areas (West)
GW468071 - Unpaved Roadways and Open Areas (East)
GW487814 - Storage Piles and Material Handling (West)
GW487815 - Storage Piles and Material Handling (East)

TABLES

Table 1 - Paved Roads
Table 2 - Paved Parking Lots
Table 3 - Unpaved Roads
Table 4 - Control Levels of Applications to Unpaved Roads
Table 5 - Unpaved Open Areas

This Page Intentionally Left Blank

GW468068



PAVED ROADS		
ROAD NUMBER	LENGTH MILES	WIDTH FEET
A-101	0.96	24.5
A-102	1.34	24.0
A-103	1.13	22.0
B-106	1.91	21.4
B-107	0.88	34.0
B-108	2.56	29.8
B-109	1.15	27.6
B-110	1.35	23.4
B-111	0.28	25.0
B-113	0.45	28.0
B-114	2.52	47.0
C-116	3.20	29.0
C-120	2.01	27.7
C-121	0.81	39.4

FOR ADDITIONAL ROADS, SEE DRAWING GW465069

PAVED PARKING LOTS	AREA - SQ YARDS
1.) SINTERING PLANT LOT	7902
2.) COKE PLANT LOT	26002
3.) MAIN OFFICE LOT (BROADWAY)	3767
4.) BROADWAY LOT	21223
5.) VIRGINIA ST. WEST	41923
6.) VIRGINIA ST. EAST	18911
7.) PLATE MILL	8000
8.) TRUCK GARAGE	15014
9.) PRODUCTION PLANNING	10400
10.) IRON PROVIDING LAB	1293
11.) ENVIRONMENTAL	2897
12.) #1 CASTER LOT	4400
13.) TRUCK SCALE	9942
14.) WEST TRUCK GARAGE	15544
15.) BUCHANAN ST.	43457
16.) TIN MILL	26573
17.) 84" HSM	14841
18.) 54" HSM DIVISION	3363

FOR PARKING LOTS 1 THRU 8, 10, 11 & 12 SEE DRAWING GW465069

REFERENCES:
GW465069
GW465070
GW465071

DLZ

FUGITIVE DUST CONTROL PLAN
PAVED ROADS AND PARKING LOTS

USS, A Division Of USX Corporation
Gary Works

PREPARED BY	DATE	CHECKED BY	DATE	SCALE
RJA	6-18-96	GLH	6-18-96	1" = 600'

PROJECT NO. GW468068

REV.	DESCRIPTION	DATE	BY	CHK.	JOB NO.
7					
6					
5					
4					
3					
2					
1					

GW468069

PAVED PARKING LOTS	AREA SQ YARDS
1.) SINTERING PLANT LOT	7901
2.) COKE PLANT LOT	25001
3.) MAIN OFFICE LOT (BROADWAY)	3769
4.) BROADWAY LOT	21227
5.) VIRGINIA ST. WEST	41926
6.) VIRGINIA ST. EAST	18911
7.) PLATE MILL	6000
8.) TRUCK GARAGE	15014
9.) PRODUCTION PLANNING	10400
10.) IRON PROVIDING LAB	1293
11.) ENVIRONMENTAL	2896
12.) #1 CASTER LOT	4400
13.) TRUCK SCALE	9942
14.) WEST TRUCK GARAGE	15543
15.) BUCHANAN ST.	43407
16.) TIN MILL	20572
17.) 84" HSM	14640
18.) 84" HSM DIVISION	3363

FOR PARKING LOTS 9 AND 13 THRU 18 SEE DRAWING GW468068

MATCH LINE
DRAWING GW468068

0 300 600 1200

PAVED ROADS		
ROAD NUMBER	LENGTH MILES	WIDTH FEET
C-115	0.90	15.0
C-116	3.29	29.0
C-117	0.63	30.0
C-118	0.98	33.8
C-119	0.89	30.0
C-120	2.01	27.7
D-122	1.46	33.9
D-123	1.33	36.7
D-124	0.49	16.0
D-125	0.25	12.0

FOR ADDITIONAL ROADS, SEE DRAWING GW468068

PAVED ROADS		
ROAD NUMBER	LENGTH MILES	WIDTH FEET
D-126	0.47	27.5
D-127	0.79	20.5
D-128	1.08	28.0
D-129	0.33	34.7
D-132	0.94	41.2
D-133	0.19	19.0
D-135	0.23	23.2
D-136	0.54	19.0
E-137	1.10	25.1
E-138	1.26	27.0

PAVED ROADS		
ROAD NUMBER	LENGTH MILES	WIDTH FEET
E-139	0.97	26.5
E-141	1.35	19.6
E-142	1.13	29.7
E-143	1.13	16.5
E-144	0.28	23.0
E-145	0.40	29.0
E-146	1.31	29.6
E-147	0.72	23.0
E-149	0.09	22.5

REFERENCES:
GW468063
GW468070
GW468071

DLZ

REV.	DESCRIPTION	DATE	BY	CHK.
7				
6				
5				
4				
3				
2				
1				

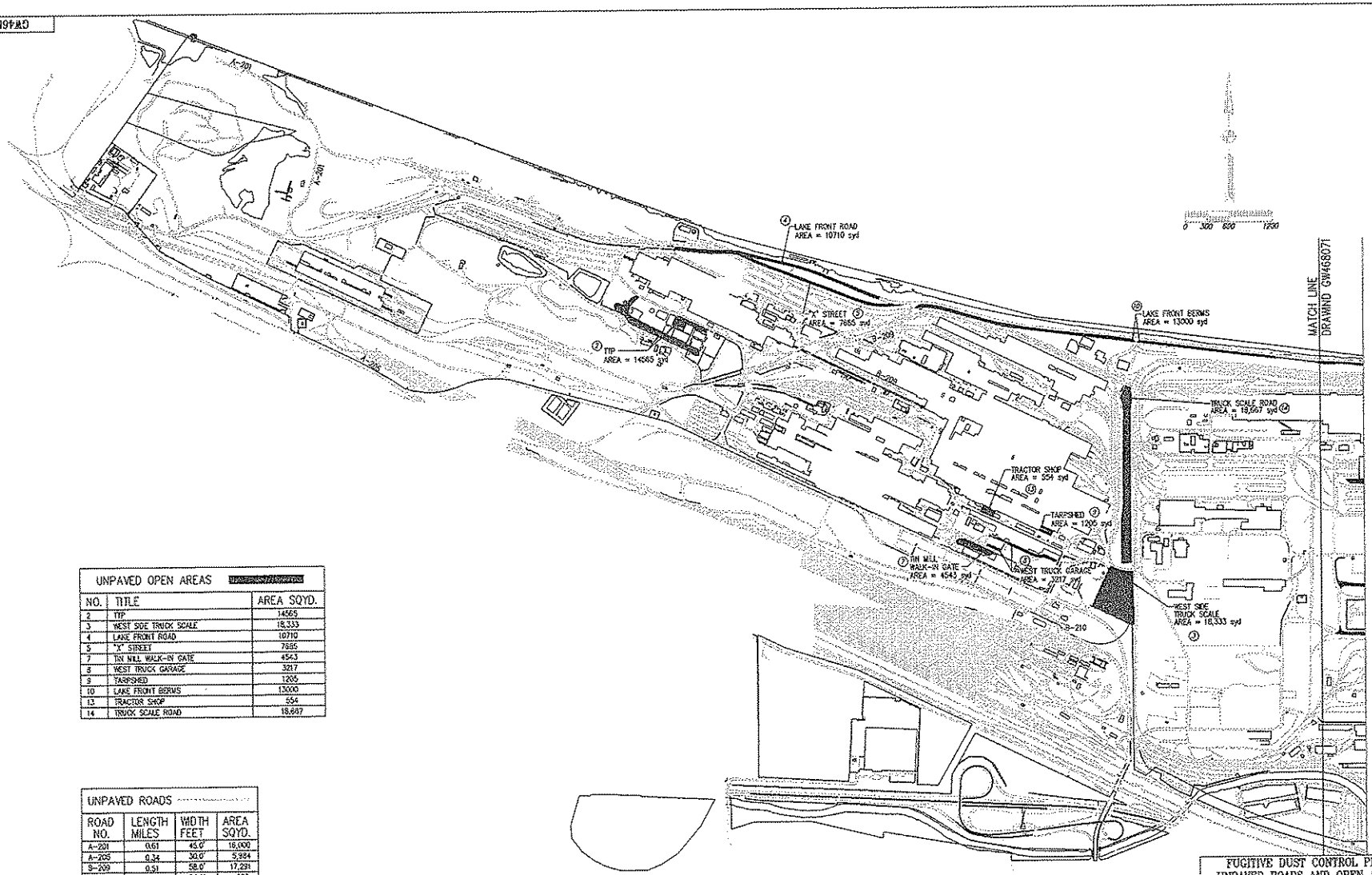
FUGITIVE DUST CONTROL PLAN
PAVED ROADS AND PARKING LOTS

USS, A Division Of USX Corporation
Gary Works

PREPARED BY	DATE	CHECKED BY	DATE	SCALE
RJA	6-18-96	GJH	6-18-96	1" = 600'

PROJECT NO.
JOB NO.
GW468069

GW468070



UNPAVED OPEN AREAS		
NO.	TITLE	AREA SQYD.
2	TTP	14565
3	WEST SIDE TRUCK SCALE	18,333
4	LAKE FRONT ROAD	10710
5	"X" STREET	7655
7	TIN MILL WALK-IN GATE	4543
8	WEST TRUCK GARAGE	3217
9	TARPSHED	1205
10	LAKE FRONT BERMS	13000
13	TRACTOR SHOP	554
14	TRUCK SCALE ROAD	18,667

UNPAVED ROADS			
ROAD NO.	LENGTH MILES	WIDTH FEET	AREA SQYD.
A-201	0.61	45.0'	16,000
A-205	0.34	30.0'	5,984
B-209	0.51	58.0'	17,231
B-210	0.07	24.0'	956

FOR ADDITIONAL ROADS SEE DRAWING GW468071

REFERENCES:
GW468068
GW468069
GW468071

DLZ

REV.	DESCRIPTION	DATE	BY	CHK.
7				
6				
5				
4	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]
1	[illegible]	[illegible]	[illegible]	[illegible]
REV.	DESCRIPTION	DATE	BY	CHK.

PREPARED BY	DATE	CHECKED BY	DATE	SCALE
RJA	6-18-96	GJH	6-18-96	1" = 600'

PROJECT NO.
JOB NO.
GW468070

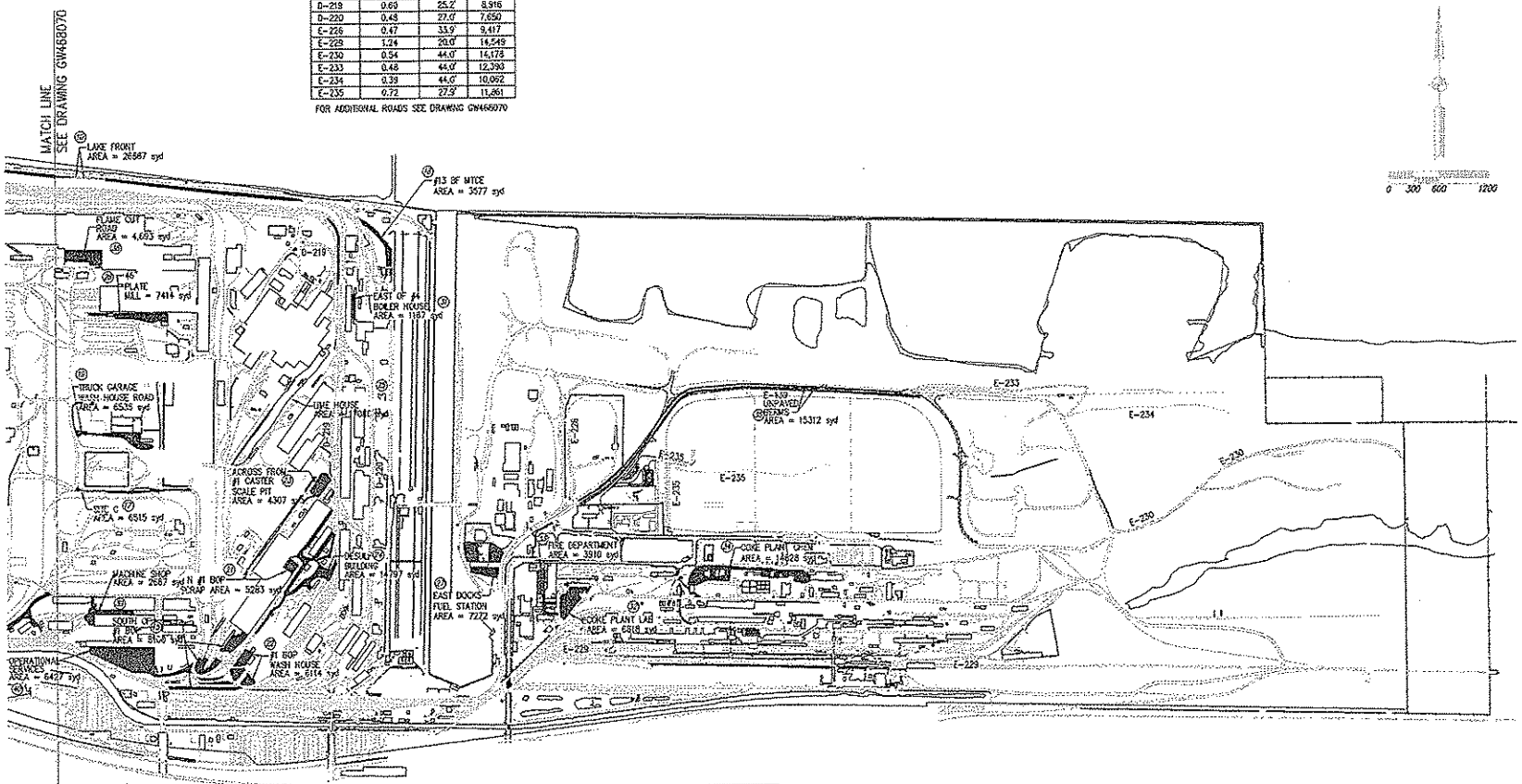
USS, A Division Of USX Corporation
Gary Works

FUGITIVE DUST CONTROL PLAN
UNPAVED ROADS AND OPEN AREAS

GW468071

UNPAVED ROADS			
ROAD NO.	LENGTH MILES	WIDTH FEET	AREA SQYD.
D-219	0.69	25.2'	8,916
D-220	0.48	27.0'	7,650
E-226	0.47	33.9'	9,417
E-229	1.24	20.0'	14,549
E-230	0.54	44.0'	14,175
E-233	0.48	44.0'	12,390
E-234	0.39	44.0'	10,062
E-235	0.72	27.9'	11,861

FOR ADDITIONAL ROADS SEE DRAWING GW468070



UNPAVED OPEN AREAS		
NO.	TITLE	AREA SQYD.
15	SOUTH OF #1 BOP SHOP	6100
17	SITE C	6515
18	#13 BF MYOE	3577
19	TRUCK GARAGE WASH HOUSE ROAD	6535
21	N #1 BOP	5283
22	#1 BOP WASH HOUSE	6114
23	ACROSS FROM #1 CASTER SCALE PIT	4307
24	DESULF BUILDING	14797
25	LIME HOUSE	17056
27	EAST DOCKS FUEL STATION	7272
28	46" PLATE MILL	7414

UNPAVED OPEN AREAS		
NO.	TITLE	AREA SQYD.
31	EAST OF #4 BOILER HOUSE	1167
32	COKE PLANT LAB	6818
33	FIRE DEPARTMENT	3910
34	COKE PLANT CHEM	14628
36	E-139 UNPAVED BERMS	15312
38	FLAME CUT ROAD	4693
39	MACHINE SHOP	2667
40	OPERATIONAL SERVICES	6427

REFERENCES:
GW468065
GW468069
GW468070

DLZ

REV	DESCRIPTION	DATE	BY	CHK.
7				
6				
5				
4	REVISED UNPAVED OPEN AREAS FOR FLAME CUT ROAD, MACHINE SHOP, EAST DOCKS FUEL STATION, COKE PLANT LAB, ETC.			
3	ROAD NAMES ADDED, OPERATIONAL SERVICES, & FLAME CUT ROAD			
2	REVISED E-231, E-232, TEMPORARY STORAGE AREA, E-139, DATA TO FLAME CUT, CONSTRUCTION TRAILER AREA, & A. BOILER HOUSE			
1	REVISED E-139, ADDED E-235 & E-236, ADDED OPEN AREAS 15, 16, 20 & 26, ADDED PRESENT AREAS			

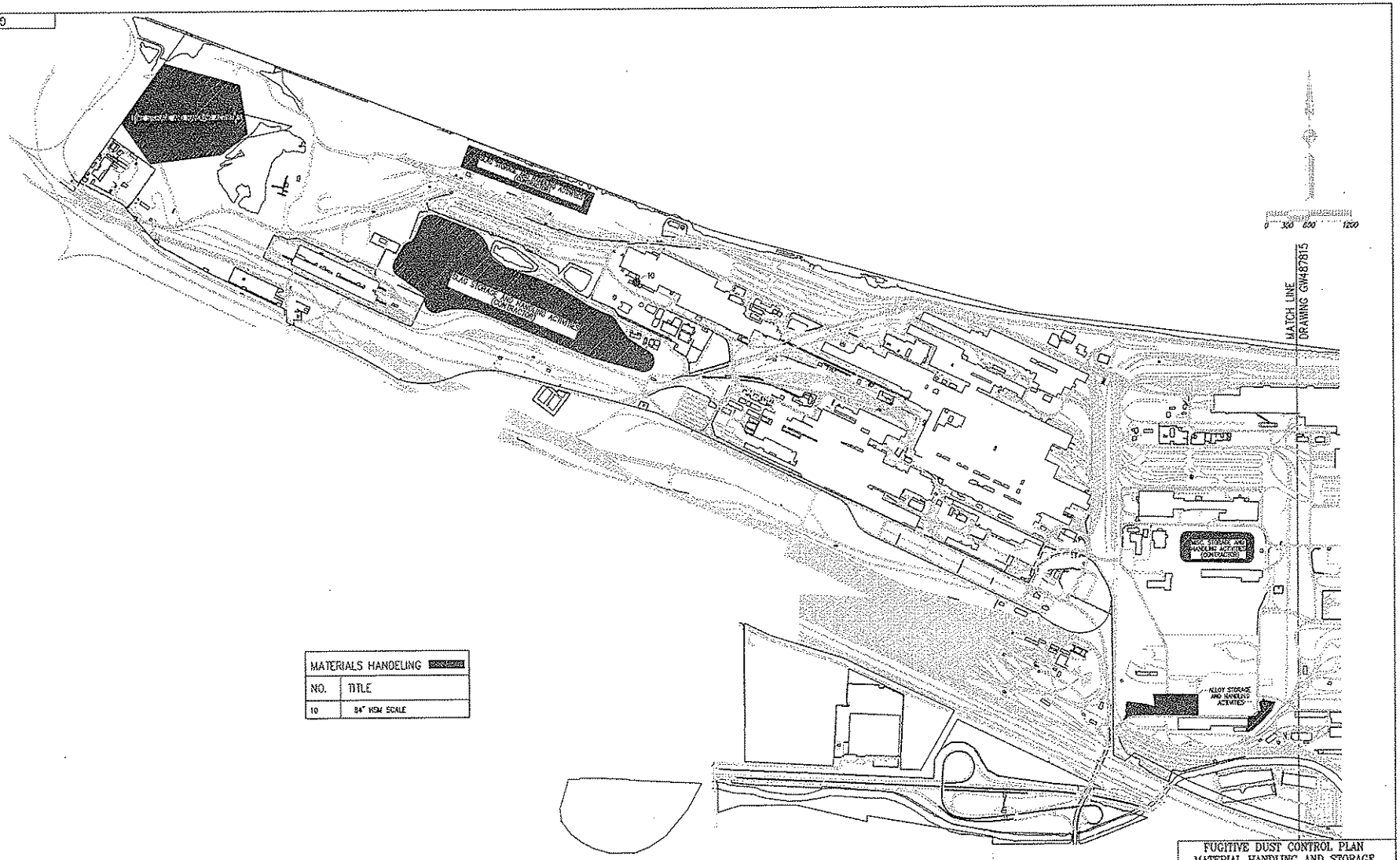
FUGITIVE DUST CONTROL PLAN
UNPAVED ROADS AND OPEN AREAS

USS, A Division Of USX Corporation
Gary Works

PREPARED BY	DATE	CHECKED BY	DATE	SCALE
RJA	6-18-96	GLH	6-18-96	1" = 600'

PROJECT NO.
JOB NO.
GW468071

GW487814



MATERIALS HANDELING	
NO.	TITLE
10	84" HSM SCALE

REFERENCES:
GW465068
GW465069
GW465070
GW465071
GW487815

DLZ

REV.	DESCRIPTION	DATE	BY	CK'D
1	REMOVED BUILDING FROM UNLABELED AREAS	1/03	JMJ	RBH
2				
3				
4				
5				
6				
7				

FUGITIVE DUST CONTROL PLAN
MATERIAL HANDLING AND STORAGE AREAS

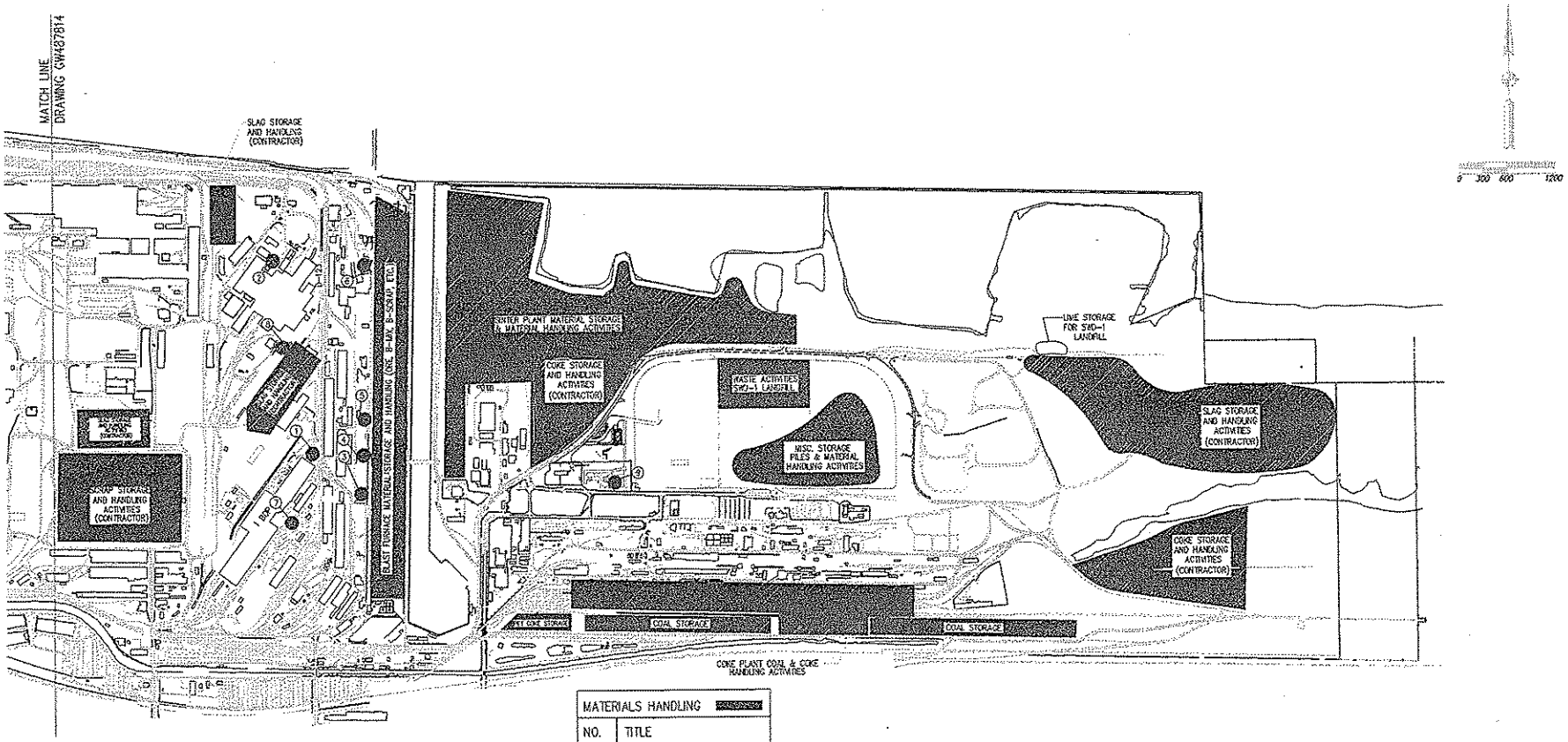
USS, A Division Of USX Corporation
Gary Works

PREPARED BY	DATE	CHECKED BY	DATE	SCALE
JMJ	10/10/02	KSS	10/10/02	1" = 600'

PROJECT NO. 0200-2400-70

JOB NO. GW487814

GW487815



MATERIALS HANDLING	
NO.	TITLE
1	#1 CASTER SCALE
2	#2 CASTER SCALE
3	#4 BLAST FURNACE DUST CATCHER
4	#6 BLAST FURNACE DUST CATCHER
5	#8 BLAST FURNACE DUST CATCHER
6	#13 BLAST FURNACE DUST CATCHER
7	1 BOP LIME HOUSE
8	2 OBOP LIME HOUSE
9	SWD-1 DUMP & MIX PAD

REFERENCES
GW486068
GW486069
GW486070
GW486071
GW487814

DLZ

REV.	DESCRIPTION	DATE	BY	CHK.
7				
6				
5				
4				
3				
2				
1				

JOB NO.

FUGITIVE DUST CONTROL PLAN
MATERIAL HANDLING AND STORAGE AREAS

USS, A Division Of USX Corporation
Gary Works

PREPARED BY	DATE	CHECKED BY	DATE	SCALE
JVJ	10/10/02	KSS	10/10/02	1" = 600'

PROJECT NO. GW487815

Table 1
PAVED ROADS

Road ID	Road Length (miles)	Average Road Width (feet)	Cleaning Schedule Frequency	Reference
A-101	0.96	24.5	1/week	Drawing GW468068
A-102	1.34	24.0	1/week	Drawing GW468068
A-103	1.13	22.0	1/week	Drawing GW468068
B-106	1.91	21.4	3/week	Drawing GW468068
B-107	0.68	34.0	7/week-1/day	Drawing GW468068
C-117	0.63	30.0	3/week	Drawing GW468069
C-118	0.98	33.8	3/week	Drawing GW468069
C-119	0.89	30.0	7/week-1/day	Drawing GW468069
C-120	2.01	27.7	7/week-1/day	Drawing GW468068 & 69
C-121	0.81	30.4	1/week	Drawing GW468068
D-122	1.46	33.9	7/week-1/day	Drawing GW468069
D-123	1.33	36.7	7/week-3/day	Drawing GW468069
D-124	0.49	16.0	7/week-1/day	Drawing GW468069
D-125	0.25	12.0	1/week	Drawing GW468069
D-126	0.47	27.5	1/week	Drawing GW468069
D-127	0.79	20.5	1/week	Drawing GW468069
D-128	1.08	28.0	1/week	Drawing GW468069
D-129	0.33	34.7	7/week-1/day	Drawing GW468069
D-132	0.94	41.2	7/week-2/day	Drawing GW468069
D-133	0.19	19.0	7/week-2/day	Drawing GW468069
E-135	0.23	23.2	3/week	Drawing GW468069
E-136	0.54	19.0	7/week-1/day	Drawing GW468069
E-137	1.10	26.1	7/week-2/day	Drawing GW468069
E-138	1.26	27.0	1/week	Drawing GW468069
E-139	0.97	26.5	7/week-1/day	Drawing GW468069
E-141	1.36	19.6	3/week	Drawing GW468069
E-142	1.13	29.7	3/week	Drawing GW468069
E-143	1.13	16.5	7/week-3/day	Drawing GW468069
E-144	0.28	23.0	7/week-1/day	Drawing GW468069
E-145	0.40	29.0	1/week	Drawing GW468069
E-146	1.31	29.6	1/week	Drawing GW468069
E-147	0.72	23.0	3/week	Drawing GW468069
E-149	0.09	22.5	3/week	Drawing GW468069

TABLE 2
PAVED PARKING LOTS

Lot Identification	Area (Sq. Yards)	Reference
1) Sintering Plant Lot	7,902	Drawing GW468069
2) Coke Plant Lot	26,002	Drawing GW468069
3) Main Office Lot (Broadway)	3,767	Drawing GW468069
4) Broadway Lot	21,223	Drawing GW468069
5) Virginia Street West	41,923	Drawing GW468069
6) Virginia Street East	18,911	Drawing GW468069
7) Plate Mill	8,000	Drawing GW468069
8) Truck Garage	15,014	Drawing GW468069
9) Production Planning	10,400	Drawing GW468068
10) Iron Producing Lab	1,293	Drawing GW468069
11) Environmental	2,897	Drawing GW468069
12) No. 1 Caster Lot	4,400	Drawing GW468069
13) Truck Scale	9,942	Drawing GW468068
14) West Truck Garage	15,544	Drawing GW468068
15) Buchanan Street	43,457	Drawing GW468068
16) Tin Mill	20,573	Drawing GW468068
17) 84" HSM	14,841	Drawing GW468068
18) 84" HSM Division	3,363	Drawing GW468068

Table 3
UNPAVED ROADS

Road ID	Road Length (miles)	Average Road Width (feet)	Area (sq yd)	Control Level (see Table 4)	Reference
A-201	0.61	45.0	16,000	III	Drawing GW468070
A-205	0.34	30.0	5,984	I	Drawing GW468070
B-209	0.51	58.0	17,291	I	Drawing GW468070
B-210	0.07	24.0	986	I	Drawing GW468070
D-219	0.60	25.2	8,916	III	Drawing GW468071
D-220	0.48	27.0	7,650	I	Drawing GW468071
E-226	0.47	33.9	9,417	II	Drawing GW468071
E-229	1.24	20.0	14,549	I	Drawing GW468071
E-230	0.54	44.0	14,178	III	Drawing GW468071
E-233	0.48	44.0	12,390	I	Drawing GW468071
E-234	0.39	44.0	10,062	I	Drawing GW468071

E-235	0.72	27.9	11,861	III	Drawing GW468071

Table 4

Control Levels of Applications to Unpaved Roads

Control Level	Asphalt Emulsions	
	Frequency of Application	Minimum Applications per Year*
I	Once (1) every three (3) months	3
II	Once (1) every two (2) months	5
III	Once (1) every (1) month	9

* The number of applications per year is based on an average treatment season of nine (9) months, March through November.

Area Identification	Area (Sq. Yards)	Reference
2) TTP	14,565	Drawing GW468070
3) West Side Truck Scale	18,333	Drawing GW468070
4) Lake Front Road	10,710	Drawing GW468070
5) "X" Street	7,685	Drawing GW468070
7) Tin Mill Walk-in Gate	4,543	Drawing GW468070
8) West Truck Garage	3,217	Drawing GW468070
9) Tarpshed	1,205	Drawing GW468070
10) Lake Front Berms	13,000	Drawing GW468070
13) Tractor Shop	554	Drawing GW468070
14) Truck Scale Road	18,667	Drawing GW468070
15) South of No.1 BOP Shop	8,100	Drawing GW468071
17) Site C	6,515	Drawing GW468071
18) No.13 BF MTCE	3,577	Drawing GW468071
19) Truck Garage Wash House Road	6,535	Drawing GW468071
21) North of No.1 BOP	5,283	Drawing GW468071
22) No.1 BOP Wash House	6,114	Drawing GW468071
23) Across from #1 Caster Scale Pit	4,307	Drawing GW468071
24) Desulf Building	14,797	Drawing GW468071
25) Lime House	17,086	Drawing GW468071
27) East Docks Fuel Station	7,272	Drawing GW468071
Area Identification	**Area (Sq. Yards)**	**Reference**
28) 46" Plate Mill	7,414	Drawing GW468071
31) East of #4 Boiler House	1,167	Drawing GW468071

32) Coke Plant Lab	6,818	Drawing GW468071
33) Fire Department	3,910	Drawing GW468071
34) Coke Plant Chem	14,828	Drawing GW468071
35) E-139 Unpaved Berms	15,312	Drawing GW468071
38) Flame Cut Road	4,693	Drawing GW468071
39) Machine Shop	2,667	Drawing GW468071
40) Operational Services	6,427	Drawing GW468071

Indiana Department of Environmental Management
Office of Air Quality

Attachment B

Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Source: 72 FR 32759, June 13, 2007, unless otherwise noted.

§ 60.40c Applicability and delegation of authority.

(a) Except as provided in paragraphs (d), (e), (f), and (g) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).

(b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, §60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.

(c) Steam generating units that meet the applicability requirements in paragraph (a) of this section are not subject to the sulfur dioxide (SO_2) or particulate matter (PM) emission limits, performance testing requirements, or monitoring requirements under this subpart (§§60.42c, 60.43c, 60.44c, 60.45c, 60.46c, or 60.47c) during periods of combustion research, as defined in §60.41c.

(d) Any temporary change to an existing steam generating unit for the purpose of conducting combustion research is not considered a modification under §60.14.

(e) Heat recovery steam generators that are associated with combined cycle gas turbines and meet the applicability requirements of subpart KKKK of this part are not subject to this subpart. This subpart will continue to apply to all other heat recovery steam generators that are capable of combusting more than or equal to 2.9 MW (10 MMBtu/hr) heat input of fossil fuel but less than or equal to 29 MW (100 MMBtu/hr) heat input of fossil fuel. If the heat recovery steam generator is subject to this subpart, only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The gas turbine emissions are subject to subpart GG or KKKK, as applicable, of this part).

(f) Any facility covered by subpart AAAA of this part is not subject by this subpart.

(g) Any facility covered by an EPA approved State or Federal section 111(d)/129 plan implementing subpart BBBB of this part is not subject by this subpart.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009]

§ 60.41c Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input capacity. In the case of steam generating units that are rented or

leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels derived from coal for the purposes of creating useful heat, including but not limited to solvent refined coal, gasified coal not meeting the definition of natural gas, coal-oil mixtures, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (kJ/kg) (6,000 Btu per pound (Btu/lb) on a dry basis.

Cogeneration steam generating unit means a steam generating unit that simultaneously produces both electrical (or mechanical) and thermal energy from the same primary energy source.

Combined cycle system means a system in which a separate source (such as a stationary gas turbine, internal combustion engine, or kiln) provides exhaust gas to a steam generating unit.

Combustion research means the experimental firing of any fuel or combination of fuels in a steam generating unit for the purpose of conducting research and development of more efficient combustion or more effective prevention or control of air pollutant emissions from combustion, provided that, during these periods of research and development, the heat generated is not used for any purpose other than preheating combustion air for use by that steam generating unit (*i.e.* , the heat generated is released to the atmosphere without being used for space heating, process heating, driving pumps, preheating combustion air for other units, generating electricity, or any other purpose).

Conventional technology means wet flue gas desulfurization technology, dry flue gas desulfurization technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see §60.17) or diesel fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D975 (incorporated by reference, see §60.17).

Dry flue gas desulfurization technology means a SO_2control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline reagent and water, whether introduced separately or as a premixed slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Emerging technology means any SO_2control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under §60.48c(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 51.24.

Fluidized bed combustion technology means a device wherein fuel is distributed onto a bed (or series of beds) of limestone aggregate (or other sorbent materials) for combustion; and these materials are forced upward in the device by the flow of combustion air and the gaseous products of combustion. Fluidized bed combustion technology includes, but is not limited to, bubbling bed units and circulating bed units.

Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).

Heat transfer medium means any material that is used to transfer heat from one point to another point.

Maximum design heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel (or combination of fuels) on a steady state basis as determined by the physical design and characteristics of the steam generating unit.

Natural gas means:

(1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or

(2) Liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see §60.17); or

(3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 megajoules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum, or a liquid fuel derived from crude oil or petroleum, including distillate oil and residual oil.

Potential sulfur dioxide emission rate means the theoretical SO_2emissions (nanograms per joule (ng/J) or lb/MMBtu heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see §60.17).

Steam generating unit means a device that combusts any fuel and produces steam or heats water or heats any heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Wet flue gas desulfurization technology means an SO_2control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of PM or SO_2.

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009]

§ 60.42c Standard for sulfur dioxide (SO2).

(a) Except as provided in paragraphs (b), (c), and (e) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that combusts only coal shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO_2emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO_2emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2in excess of the emission limit is determined pursuant to paragraph (e)(2) of this section.

(b) Except as provided in paragraphs (c) and (e) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that:

(1) Combusts only coal refuse alone in a fluidized bed combustion steam generating unit shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 20 percent (0.20) of the potential SO_2emission rate (80 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2in excess of SO_2in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is fired with coal refuse, the affected facility subject to paragraph (a) of this section. If oil or any other fuel (except coal) is fired with coal refuse, the affected facility is subject to the 87 ng/J (0.20 lb/MMBtu) heat input SO_2emissions limit or the 90 percent SO_2reduction requirement specified in paragraph (a) of this section and the emission limit is determined pursuant to paragraph (e)(2) of this section.

(2) Combusts only coal and that uses an emerging technology for the control of SO_2emissions shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2in excess of 50 percent (0.50) of the potential SO_2emission rate (50 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2in excess of 260 ng/J (0.60 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility is subject to the 50 percent SO_2reduction requirement specified in this paragraph and the emission limit determined pursuant to paragraph (e)(2) of this section.

(c) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, alone or in combination with any other fuel, and is listed in paragraphs (c)(1), (2), (3), or (4) of this section shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2in excess of the emission limit determined pursuant to paragraph (e)(2) of this section. Percent reduction requirements are not applicable to affected facilities under paragraphs (c)(1), (2), (3), or (4).

(1) Affected facilities that have a heat input capacity of 22 MW (75 MMBtu/hr) or less.

(2) Affected facilities that have an annual capacity for coal of 55 percent (0.55) or less and are subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for coal of 55 percent (0.55) or less.

(3) Affected facilities located in a noncontinental area.

(4) Affected facilities that combust coal in a duct burner as part of a combined cycle system where 30 percent (0.30) or less of the heat entering the steam generating unit is from combustion of coal in the duct burner and 70 percent (0.70) or more of the heat entering the steam generating unit is from exhaust gases entering the duct burner.

(d) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2in excess of 215 ng/J (0.50 lb/MMBtu) heat input; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

(e) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, or coal and oil with any other fuel shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2in excess of the following:

(1) The percent of potential SO_2emission rate or numerical SO_2emission rate required under paragraph (a) or (b)(2) of this section, as applicable, for any affected facility that

(i) Combusts coal in combination with any other fuel;

(ii) Has a heat input capacity greater than 22 MW (75 MMBtu/hr); and

(iii) Has an annual capacity factor for coal greater than 55 percent (0.55); and

(2) The emission limit determined according to the following formula for any affected facility that combusts coal, oil, or coal and oil with any other fuel:

$$E_s = \frac{(K_a H_a + K_b H_b + K_c H_c)}{(H_a + H_b + H_c)}$$

Where:

E_s= SO_2emission limit, expressed in ng/J or lb/MMBtu heat input;

K_a= 520 ng/J (1.2 lb/MMBtu);

K_b= 260 ng/J (0.60 lb/MMBtu);

K_c= 215 ng/J (0.50 lb/MMBtu);

H_a= Heat input from the combustion of coal, except coal combusted in an affected facility subject to paragraph (b)(2) of this section, in Joules (J) [MMBtu];

H_b= Heat input from the combustion of coal in an affected facility subject to paragraph (b)(2) of this section, in J (MMBtu); and

H_c= Heat input from the combustion of oil, in J (MMBtu).

(f) Reduction in the potential SO_2emission rate through fuel pretreatment is not credited toward the percent reduction requirement under paragraph (b)(2) of this section unless:

(1) Fuel pretreatment results in a 50 percent (0.50) or greater reduction in the potential SO_2emission rate; and

(2) Emissions from the pretreated fuel (without either combustion or post-combustion SO_2control) are equal to or less than the emission limits specified under paragraph (b)(2) of this section.

(g) Except as provided in paragraph (h) of this section, compliance with the percent reduction requirements, fuel oil sulfur limits, and emission limits of this section shall be determined on a 30-day rolling average basis.

(h) For affected facilities listed under paragraphs (h)(1), (2), or (3) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under §60.48c(f), as applicable.

(1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 MMBtu/hr).

(2) Residual oil-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).

(3) Coal-fired facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).

(i) The SO_2emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.

(j) For affected facilities located in noncontinental areas and affected facilities complying with the percent reduction standard, only the heat input supplied to the affected facility from the combustion of coal and oil is counted under this section. No credit is provided for the heat input to the affected facility from wood or other fuels or for heat derived from exhaust gases from other sources, such as stationary gas turbines, internal combustion engines, and kilns.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009]

§ 60.43c Standard for particulate matter (PM).

(a) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal or combusts mixtures of coal with other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:

(1) 22 ng/J (0.051 lb/MMBtu) heat input if the affected facility combusts only coal, or combusts coal with other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.

(2) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility combusts coal with other fuels, has an annual capacity factor for the other fuels greater than 10 percent (0.10), and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor greater than 10 percent (0.10) for fuels other than coal.

(b) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts wood or combusts mixtures of wood with other fuels (except coal) and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emissions limits:

(1) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood greater than 30 percent (0.30); or

(2) 130 ng/J (0.30 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood of 30 percent (0.30) or less and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for wood of 30 percent (0.30) or less.

(c) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that can combust coal, wood, or oil and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. Owners and operators of an affected facility that elect to install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for measuring PM emissions according to the requirements of this subpart and are subject to a federally enforceable PM limit of 0.030 lb/MMBtu or less are exempt from the opacity standard specified in this paragraph.

(d) The PM and opacity standards under this section apply at all times, except during periods of startup, shutdown, or malfunction.

(e)(1) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 13 ng/J (0.030 lb/MMBtu) heat input, except as provided in paragraphs (e)(2), (e)(3), and (e)(4) of this section.

(2) As an alternative to meeting the requirements of paragraph (e)(1) of this section, the owner or operator of an affected facility for which modification commenced after February 28, 2005, may elect to meet the requirements of this paragraph. On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005 shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of both:

(i) 22 ng/J (0.051 lb/MMBtu) heat input derived from the combustion of coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels; and

(ii) 0.2 percent of the combustion concentration (99.8 percent reduction) when combusting coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels.

(3) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input.

(4) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, an owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM standard under §60.43c and not using a post-combustion technology (except a wet scrubber) to reduce PM or SO_2emissions is not subject to the PM limit in this section.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

§ 60.44c Compliance and performance test methods and procedures for sulfur dioxide.

(a) Except as provided in paragraphs (g) and (h) of this section and §60.8(b), performance tests required under §60.8 shall be conducted following the procedures specified in paragraphs (b), (c), (d), (e), and (f) of this section, as applicable. Section 60.8(f) does not apply to this section. The 30-day notice required in §60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator.

(b) The initial performance test required under §60.8 shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the percent reduction requirements and SO_2emission limits under §60.42c shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affect facility will be operated, but not later than 180 days after the initial startup of the facility. The steam generating unit load during the 30-day period does not have to be the maximum design heat input capacity, but must be representative of future operating conditions.

(c) After the initial performance test required under paragraph (b) of this section and §60.8, compliance with the percent reduction requirements and SO_2emission limits under §60.42c is based on the average percent reduction and the average SO_2emission rates for 30 consecutive steam generating unit operating days. A separate performance test is completed at the end of each steam generating unit operating day, and a new 30-day average percent reduction and SO_2emission rate are calculated to show compliance with the standard.

(d) If only coal, only oil, or a mixture of coal and oil is combusted in an affected facility, the procedures in Method 19 of appendix A of this part are used to determine the hourly SO_2emission rate (E_{ho}) and the 30-day average SO_2emission rate (E_{ao}). The hourly averages used to compute the 30-day averages are obtained from the CEMS. Method 19 of appendix A of this part shall be used to calculate $E_{ao}$when using daily fuel sampling or Method 6B of appendix A of this part.

(e) If coal, oil, or coal and oil are combusted with other fuels:

(1) An adjusted E_{ho}(E_{ho}o) is used in Equation 19–19 of Method 19 of appendix A of this part to compute the adjusted E_{ao}(E_{ao}o). The E_{ho}o is computed using the following formula:

$$E_{ho}o = \frac{E_{ho} - E_w(1 - X_k)}{X_k}$$

Where:

E_{ho}o = Adjusted E_{ho}, ng/J (lb/MMBtu);

E_{ho}= Hourly SO_2emission rate, ng/J (lb/MMBtu);

E_w= SO_2concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 9 of appendix A of this part, ng/J (lb/MMBtu). The value $E_w$for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure $E_w$if the owner or operator elects to assume E_w= 0.

X_k= Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(2) The owner or operator of an affected facility that qualifies under the provisions of §60.42c(c) or (d) (where percent reduction is not required) does not have to measure the parameters $E_w$or $X_k$if the owner or operator of the affected facility elects to measure emission rates of the coal or oil using the fuel sampling and analysis procedures under Method 19 of appendix A of this part.

(f) Affected facilities subject to the percent reduction requirements under §60.42c(a) or (b) shall determine compliance with the SO_2emission limits under §60.42c pursuant to paragraphs (d) or (e) of this section, and shall determine compliance with the percent reduction requirements using the following procedures:

(1) If only coal is combusted, the percent of potential SO_2emission rate is computed using the following formula:

$$\%P_s = 100\left(1 - \frac{\%R_g}{100}\right)\left(1 - \frac{\%R_f}{100}\right)$$

Where:

$\%P_s$= Potential SO_2emission rate, in percent;

$\%R_g$= SO_2removal efficiency of the control device as determined by Method 19 of appendix A of this part, in percent; and

$\%R_f$= SO_2removal efficiency of fuel pretreatment as determined by Method 19 of appendix A of this part, in percent.

(2) If coal, oil, or coal and oil are combusted with other fuels, the same procedures required in paragraph (f)(1) of this section are used, except as provided for in the following:

(i) To compute the $\%P_s$, an adjusted $\%R_g$($\%R_g$o) is computed from E_{ao}o from paragraph (e)(1) of this section and an adjusted average SO_2inlet rate (E_{ai}o) using the following formula:

$$\%R_g o = 100\left(1 - \frac{E^{\circ}_{ao}}{E^{\circ}_{ai}}\right)$$

Where:

$\%R_g$o = Adjusted $\%R_g$, in percent;

E_{ao}o = Adjusted E_{ao}, ng/J (lb/MMBtu); and

E_{ai}o = Adjusted average SO_2inlet rate, ng/J (lb/MMBtu).

(ii) To compute E_{ai}o, an adjusted hourly SO_2inlet rate (E_{hi}o) is used. The E_{hi}o is computed using the following formula:

$$E_{hi}o = \frac{E_{hi} - E_w(1 - X_k)}{X_k}$$

Where:

E_{hi}o = Adjusted E_{hi}, ng/J (lb/MMBtu);

E_{hi}= Hourly SO_2inlet rate, ng/J (lb/MMBtu);

E_w= SO_2concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 19 of appendix A of this part, ng/J (lb/MMBtu). The value $E_w$for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure $E_w$if the owner or operator elects to assume E_w= 0; and

X_k= Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(g) For oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under §60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under §60.46c(d)(2).

(h) For affected facilities subject to §60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO_2standards based on fuel supplier certification, the performance test shall consist of the certification from the fuel supplier, as described in §60.48c(f), as applicable.

(i) The owner or operator of an affected facility seeking to demonstrate compliance with the SO_2standards under §60.42c(c)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(j) The owner or operator of an affected facility shall use all valid SO_2emissions data in calculating $\%P_s$and E_{ho}under paragraphs (d), (e), or (f) of this section, as applicable, whether or not the minimum emissions data requirements under §60.46c(f) are achieved. All valid emissions data, including valid data collected during periods of startup, shutdown, and malfunction, shall be used in calculating $\%P_s$or E_{ho}pursuant to paragraphs (d), (e), or (f) of this section, as applicable.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

§ 60.45c Compliance and performance test methods and procedures for particulate matter.

(a) The owner or operator of an affected facility subject to the PM and/or opacity standards under §60.43c shall conduct an initial performance test as required under §60.8, and shall conduct subsequent performance tests as requested by the Administrator, to determine compliance with the standards using the following procedures and reference methods, except as specified in paragraph (c) of this section.

(1) Method 1 of appendix A of this part shall be used to select the sampling site and the number of traverse sampling points.

(2) Method 3A or 3B of appendix A–2 of this part shall be used for gas analysis when applying Method 5 or 5B of appendix A–3 of this part or 17 of appendix A–6 of this part.

(3) Method 5, 5B, or 17 of appendix A of this part shall be used to measure the concentration of PM as follows:

(i) Method 5 of appendix A of this part may be used only at affected facilities without wet scrubber systems.

(ii) Method 17 of appendix A of this part may be used at affected facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of Sections 8.1 and 11.1 of Method 5B of appendix A of this part may be used in Method 17 of appendix A of this part only if Method 17 of appendix A of this part is used in conjunction with a wet scrubber system. Method 17 of appendix A of this part shall not be used in conjunction with a wet scrubber system if the effluent is saturated or laden with water droplets.

(iii) Method 5B of appendix A of this part may be used in conjunction with a wet scrubber system.

(4) The sampling time for each run shall be at least 120 minutes and the minimum sampling volume shall be 1.7 dry standard cubic meters (dscm) [60 dry standard cubic feet (dscf)] except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.

(5) For Method 5 or 5B of appendix A of this part, the temperature of the sample gas in the probe and filter holder shall be monitored and maintained at 160 ±14 °C (320±25 °F).

(6) For determination of PM emissions, an oxygen (O_2) or carbon dioxide (CO_2) measurement shall be obtained simultaneously with each run of Method 5, 5B, or 17 of appendix A of this part by traversing the duct at the same sampling location.

(7) For each run using Method 5, 5B, or 17 of appendix A of this part, the emission rates expressed in ng/J (lb/MMBtu) heat input shall be determined using:

(i) The O_2or CO_2measurements and PM measurements obtained under this section, (ii) The dry basis F factor, and

(iii) The dry basis emission rate calculation procedure contained in Method 19 of appendix A of this part.

(8) Method 9 of appendix A–4 of this part shall be used for determining the opacity of stack emissions.

(b) The owner or operator of an affected facility seeking to demonstrate compliance with the PM standards under §60.43c(b)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(c) In place of PM testing with Method 5 or 5B of appendix A–3 of this part or Method 17 of appendix A–6 of this part, an owner or operator may elect to install, calibrate, maintain, and operate a CEMS for monitoring PM emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who elects to continuously monitor PM emissions instead of conducting performance testing using Method 5 or 5B of appendix A–3 of this part or Method 17 of appendix A–6 of this part shall install, calibrate, maintain, and operate a CEMS and shall comply with the requirements specified in paragraphs (c)(1) through (c)(14) of this section.

(1) Notify the Administrator 1 month before starting use of the system.

(2) Notify the Administrator 1 month before stopping use of the system.

(3) The monitor shall be installed, evaluated, and operated in accordance with §60.13 of subpart A of this part.

(4) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under §60.8 of subpart A of this part or within 180 days of notification to the Administrator of use of CEMS if the owner or operator was previously determining compliance by Method 5, 5B, or 17 of appendix A of this part performance tests, whichever is later.

(5) The owner or operator of an affected facility shall conduct an initial performance test for PM emissions as required under §60.8 of subpart A of this part. Compliance with the PM emission limit shall be determined by using the CEMS specified in paragraph (d) of this section to measure PM and calculating a 24-hour block arithmetic average emission concentration using EPA Reference Method 19 of appendix A of this part, section 4.1.

(6) Compliance with the PM emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using CEMS outlet data.

(7) At a minimum, valid CEMS hourly averages shall be obtained as specified in paragraph (c)(7)(i) of this section for 75 percent of the total operating hours per 30-day rolling average.

(i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.

(ii) [Reserved]

(8) The 1-hour arithmetic averages required under paragraph (c)(7) of this section shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under §60.13(e)(2) of subpart A of this part.

(9) All valid CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (c)(7) of this section are not met.

(10) The CEMS shall be operated according to Performance Specification 11 in appendix B of this part.

(11) During the correlation testing runs of the CEMS required by Performance Specification 11 in appendix B of this part, PM and O_2(or CO_2) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and performance tests conducted using the following test methods.

(i) For PM, Method 5 or 5B of appendix A–3 of this part or Method 17 of appendix A–6 of this part shall be used; and

(ii) After July 1, 2010 or after Method 202 of appendix M of part 51 has been revised to minimize artifact measurement and notice of that change has been published in theFederal Register,whichever is later, for condensable PM emissions, Method 202 of appendix M of part 51 shall be used; and

(iii) For O2 (or CO_2), Method 3A or 3B of appendix A–2 of this part, as applicable shall be used.

(12) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 2 in appendix F of this part. Relative Response Audit's must be performed annually and Response Correlation Audits must be performed every 3 years.

(13) When PM emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Administrator or EPA Reference Method 19 of appendix A of this part to provide, as necessary, valid emissions data for a minimum of 75 percent of total operating hours on a 30-day rolling average.

(14) After July 1, 2011, within 90 days after the date of completing each performance evaluation required by paragraph (c)(11) of this section, the owner or operator of the affected facility must either submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at *http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main* or mail a copy to: United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; Mail Code: D243–01; RTP, NC 27711.

(d) The owner or operator of an affected facility seeking to demonstrate compliance under §60.43c(e)(4) shall follow the applicable procedures under §60.48c(f). For residual oil-fired affected facilities, fuel supplier certifications are only allowed for facilities with heat input capacities between 2.9 and 8.7 MW (10 to 30 MMBtu/hr).

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

§ 60.46c Emission monitoring for sulfur dioxide.

(a) Except as provided in paragraphs (d) and (e) of this section, the owner or operator of an affected facility subject to the SO_2emission limits under §60.42c shall install, calibrate, maintain, and operate a CEMS for measuring SO_2concentrations and either O_2or CO_2concentrations at the outlet of the SO_2control device (or the outlet of the steam generating unit if no SO_2control device is used), and shall record the output of the system. The owner or operator of an affected facility subject to the percent reduction requirements under §60.42c shall measure SO_2concentrations and either O_2or CO_2concentrations at both the inlet and outlet of the SO_2control device.

(b) The 1-hour average SO_2emission rates measured by a CEMS shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under §60.42c. Each 1-hour average SO_2emission rate

must be based on at least 30 minutes of operation, and shall be calculated using the data points required under §60.13(h)(2). Hourly SO_2emission rates are not calculated if the affected facility is operated less than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day.

(c) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the CEMS.

(1) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 of appendix B of this part.

(2) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of appendix F of this part.

(3) For affected facilities subject to the percent reduction requirements under §60.42c, the span value of the SO_2CEMS at the inlet to the SO_2control device shall be 125 percent of the maximum estimated hourly potential SO_2emission rate of the fuel combusted, and the span value of the SO_2CEMS at the outlet from the SO_2control device shall be 50 percent of the maximum estimated hourly potential SO_2emission rate of the fuel combusted.

(4) For affected facilities that are not subject to the percent reduction requirements of §60.42c, the span value of the SO_2CEMS at the outlet from the SO_2control device (or outlet of the steam generating unit if no SO_2control device is used) shall be 125 percent of the maximum estimated hourly potential SO_2emission rate of the fuel combusted.

(d) As an alternative to operating a CEMS at the inlet to the SO_2control device (or outlet of the steam generating unit if no SO_2control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO_2emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEMS at the outlet from the SO_2control device (or outlet of the steam generating unit if no SO_2control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO_2emission rate by using Method 6B of appendix A of this part. Fuel sampling shall be conducted pursuant to either paragraph (d)(1) or (d)(2) of this section. Method 6B of appendix A of this part shall be conducted pursuant to paragraph (d)(3) of this section.

(1) For affected facilities combusting coal or oil, coal or oil samples shall be collected daily in an as-fired condition at the inlet to the steam generating unit and analyzed for sulfur content and heat content according the Method 19 of appendix A of this part. Method 19 of appendix A of this part provides procedures for converting these measurements into the format to be used in calculating the average SO_2input rate.

(2) As an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

(3) Method 6B of appendix A of this part may be used in lieu of CEMS to measure SO_2at the inlet or outlet of the SO_2control system. An initial stratification test is required to verify the adequacy of the Method 6B of appendix A of this part sampling location. The stratification test shall consist of three paired runs of a suitable $SO_2$and CO_2measurement train operated at the candidate location and a second similar train operated according to the procedures in §3.2 and the applicable procedures in section 7 of Performance Specification 2 of appendix B of this part. Method 6B of appendix A of this part, Method 6A of appendix A of this part, or a combination of Methods 6 and 3 of appendix A of this part or Methods 6C and 3A of appendix A of this part are suitable measurement techniques. If Method 6B of appendix A of this part is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B of appendix A of this part 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent (0.10).

(e) The monitoring requirements of paragraphs (a) and (d) of this section shall not apply to affected facilities subject to §60.42c(h) (1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO_2standards based on fuel supplier certification, as described under §60.48c(f), as applicable.

(f) The owner or operator of an affected facility operating a CEMS pursuant to paragraph (a) of this section, or conducting as-fired fuel sampling pursuant to paragraph (d)(1) of this section, shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive steam generating unit operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator.

§ 60.47c Emission monitoring for particulate matter.

(a) Except as provided in paragraphs (c), (d), (e), (f), and (g) of this section, the owner or operator of an affected facility combusting coal, oil, or wood that is subject to the opacity standards under §60.43c shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility subject to an opacity standard in §60.43c(c) and that is not required to install a COMS due to paragraphs (c), (d), (e), or (f) of this section that elects not to install a COMS shall conduct a performance test using Method 9 of appendix A–4 of this part and the procedures in §60.11 to demonstrate compliance with the applicable limit in §60.43c and shall comply with either paragraphs (a)(1), (a)(2), or (a)(3) of this section. If during the initial 60 minutes of observation all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent, the observation period may be reduced from 3 hours to 60 minutes.

(1) Except as provided in paragraph (a)(2) and (a)(3) of this section, the owner or operator shall conduct subsequent Method 9 of appendix A–4 of this part performance tests using the procedures in paragraph (a) of this section according to the applicable schedule in paragraphs (a)(1)(i) through (a)(1)(iv) of this section, as determined by the most recent Method 9 of appendix A–4 of this part performance test results.

(i) If no visible emissions are observed, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted;

(ii) If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted;

(iii) If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 3 calendar months from the date that the most recent performance test was conducted; or

(iv) If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 30 calendar days from the date that the most recent performance test was conducted.

(2) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A–4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A–4 of this part performance tests, elect to perform subsequent monitoring using Method 22 of appendix A–7 of this part according to the procedures specified in paragraphs (a)(2)(i) and (ii) of this section.

(i) The owner or operator shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel for which an opacity standard is applicable using Method 22 of appendix A–7 of this part and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (*i.e.* , 30 seconds per 10 minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (*i.e.* , 90 seconds per 30 minute period) the owner or operator shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute

observation (*i.e.* , 90 seconds) or conduct a new Method 9 of appendix A–4 of this part performance test using the procedures in paragraph (a) of this section within 30 calendar days according to the requirements in §60.45c(a)(8).

(ii) If no visible emissions are observed for 30 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed.

(3) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A–4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A–4 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Administrator. The observations shall be similar, but not necessarily identical, to the requirements in paragraph (a)(2) of this section. For reference purposes in preparing the monitoring plan, see OAQPS “Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems.” This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Policy Group (D243–02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods.

(b) All COMS shall be operated in accordance with the applicable procedures under Performance Specification 1 of appendix B of this part. The span value of the opacity COMS shall be between 60 and 80 percent.

(c) Owners and operators of an affected facilities that burn only distillate oil that contains no more than 0.5 weight percent sulfur and/or liquid or gaseous fuels with potential sulfur dioxide emission rates of 26 ng/J (0.060 lb/MMBtu) heat input or less and that do not use a post-combustion technology to reduce SO2 or PM emissions and that are subject to an opacity standard in §60.43c(c) are not required to operate a COMS if they follow the applicable procedures in §60.48c(f).

(d) Owners or operators complying with the PM emission limit by using a PM CEMS must calibrate, maintain, operate, and record the output of the system for PM emissions discharged to the atmosphere as specified in §60.45c(c). The CEMS specified in paragraph §60.45c(c) shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

(e) Owners and operators of an affected facility that is subject to an opacity standard in §60.43c(c) and that does not use post-combustion technology (except a wet scrubber) for reducing PM, SO_2, or carbon monoxide (CO) emissions, burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur, and is operated such that emissions of CO discharged to the atmosphere from the affected facility are maintained at levels less than or equal to 0.15 lb/MMBtu on a boiler operating day average basis is not required to operate a COMS. Owners and operators of affected facilities electing to comply with this paragraph must demonstrate compliance according to the procedures specified in paragraphs (e)(1) through (4) of this section; or

(1) You must monitor CO emissions using a CEMS according to the procedures specified in paragraphs (e)(1)(i) through (iv) of this section.

(i) The CO CEMS must be installed, certified, maintained, and operated according to the provisions in §60.58b(i)(3) of subpart Eb of this part.

(ii) Each 1-hour CO emissions average is calculated using the data points generated by the CO CEMS expressed in parts per million by volume corrected to 3 percent oxygen (dry basis).

(iii) At a minimum, valid 1-hour CO emissions averages must be obtained for at least 90 percent of the operating hours on a 30-day rolling average basis. The 1-hour averages are calculated using the data points required in §60.13(h)(2).

(iv) Quarterly accuracy determinations and daily calibration drift tests for the CO CEMS must be performed in accordance with procedure 1 in appendix F of this part.

(2) You must calculate the 1-hour average CO emissions levels for each steam generating unit operating day by multiplying the average hourly CO output concentration measured by the CO CEMS times the corresponding average hourly flue gas flow rate and divided by the corresponding average hourly heat input to the affected source. The 24-hour average CO emission level is determined by calculating the arithmetic average of the hourly CO emission levels computed for each steam generating unit operating day.

(3) You must evaluate the preceding 24-hour average CO emission level each steam generating unit operating day excluding periods of affected source startup, shutdown, or malfunction. If the 24-hour average CO emission level is greater than 0.15 lb/MMBtu, you must initiate investigation of the relevant equipment and control systems within 24 hours of the first discovery of the high emission incident and, take the appropriate corrective action as soon as practicable to adjust control settings or repair equipment to reduce the 24-hour average CO emission level to 0.15 lb/MMBtu or less.

(4) You must record the CO measurements and calculations performed according to paragraph (e) of this section and any corrective actions taken. The record of corrective action taken must include the date and time during which the 24-hour average CO emission level was greater than 0.15 lb/MMBtu, and the date, time, and description of the corrective action.

(f) Owners and operators of an affected facility that is subject to an opacity standard in §60.43c(c) and that uses a bag leak detection system to monitor the performance of a fabric filter (baghouse) according to the most recent requirements in section §60.48Da of this part is not required to operate a COMS.

(g) Owners and operators of an affected facility that is subject to an opacity standard in §60.43c(c) and that burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur and operates according to a written site-specific monitoring plan approved by the permitting authority is not required to operate a COMS. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

§ 60.48c Reporting and recordkeeping requirements.

(a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by §60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §60.42c, or §60.43c.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

(4) Notification if an emerging technology will be used for controlling SO_2emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

(b) The owner or operator of each affected facility subject to the SO_2emission limits of §60.42c, or the PM or opacity limits of §60.43c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS and/or COMS using the applicable performance specifications in appendix B of this part.

(c) In addition to the applicable requirements in §60.7, the owner or operator of an affected facility subject to the opacity limits in §60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility

that occur during the reporting period and maintain records according to the requirements specified in paragraphs (c)(1) through (3) of this section, as applicable to the visible emissions monitoring method used.

(1) For each performance test conducted using Method 9 of appendix A–4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (c)(1)(i) through (iii) of this section.

(i) Dates and time intervals of all opacity observation periods;

(ii) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

(iii) Copies of all visible emission observer opacity field data sheets;

(2) For each performance test conducted using Method 22 of appendix A–4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (c)(2)(i) through (iv) of this section.

(i) Dates and time intervals of all visible emissions observation periods;

(ii) Name and affiliation for each visible emission observer participating in the performance test;

(iii) Copies of all visible emission observer opacity field data sheets; and

(iv) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the owner or operator to demonstrate compliance with the applicable monitoring requirements.

(3) For each digital opacity compliance system, the owner or operator shall maintain records and submit reports according to the requirements specified in the site-specific monitoring plan approved by the Administrator

(d) The owner or operator of each affected facility subject to the SO_2emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall submit reports to the Administrator.

(e) The owner or operator of each affected facility subject to the SO_2emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall keep records and submit reports as required under paragraph (d) of this section, including the following information, as applicable.

(1) Calendar dates covered in the reporting period.

(2) Each 30-day average SO_2emission rate (ng/J or lb/MMBtu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.

(3) Each 30-day average percent of potential SO_2emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of the corrective actions taken.

(4) Identification of any steam generating unit operating days for which SO_2or diluent (O_2or CO_2) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.

(5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.

(6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

(7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.

(8) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS.

(9) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 of appendix B of this part.

(10) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.

(11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), (3), or (4) of this section, as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

(f) Fuel supplier certification shall include the following information:

(1) For distillate oil:

(i) The name of the oil supplier;

(ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c; and

(iii) The sulfur content or maximum sulfur content of the oil.

(2) For residual oil:

(i) The name of the oil supplier;

(ii) The location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility, or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility, or other location;

(iii) The sulfur content of the oil from which the shipment came (or of the shipment itself); and

(iv) The method used to determine the sulfur content of the oil.

(3) For coal:

(i) The name of the coal supplier;

(ii) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the sample was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected);

(iii) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and

(iv) The methods used to determine the properties of the coal.

(4) For other fuels:

(i) The name of the supplier of the fuel;

(ii) The potential sulfur emissions rate or maximum potential sulfur emissions rate of the fuel in ng/J heat input; and

(iii) The method used to determine the potential sulfur emissions rate of the fuel.

(g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

(2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO_2standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

(3) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in §60.42C to use fuel certification to demonstrate compliance with the SO_2standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

(h) The owner or operator of each affected facility subject to a federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under §60.42c or §60.43c shall calculate the annual capacity factor individually for each fuel combusted. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month.

(i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

(j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

Indiana Department of Environmental Management
Office of Air Quality

Attachment C

Subpart Y—Standards of Performance for Coal Preparation and Processing Plants

Title 40: Protection of Environment
PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart Y—Standards of Performance for Coal Preparation and Processing Plants

Source: 74 FR 51977, Oct. 8, 2009, unless otherwise noted.

§ 60.250 Applicability and designation of affected facility.

(a) The provisions of this subpart apply to affected facilities in coal preparation and processing plants that process more than 181 megagrams (Mg) (200 tons) of coal per day.

(b) The provisions in §60.251, §60.252(a), §60.253(a), §60.254(a), §60.255(a), and §60.256(a) of this subpart are applicable to any of the following affected facilities that commenced construction, reconstruction or modification after October 27, 1974, and on or before April 28, 2008: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), and coal storage systems, transfer and loading systems.

(c) The provisions in §60.251, §60.252(b)(1) and (c), §60.253(b), §60.254(b), §60.255(b) through (h), §60.256(b) and (c), §60.257, and §60.258 of this subpart are applicable to any of the following affected facilities that commenced construction, reconstruction or modification after April 28, 2008, and on or before May 27, 2009: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), and coal storage systems, transfer and loading systems.

(d) The provisions in §60.251, §60.252(b)(1) through (3), and (c), §60.253(b), §60.254(b) and (c), §60.255(b) through (h), §60.256(b) and (c), §60.257, and §60.258 of this subpart are applicable to any of the following affected facilities that commenced construction, reconstruction or modification after May 27, 2009: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), coal storage systems, transfer and loading systems, and open storage piles.

§ 60.251 Definitions.

As used in this subpart, all terms not defined herein have the meaning given them in the Clean Air Act (Act) and in subpart A of this part.

(a) *Anthracite* means coal that is classified as anthracite according to the American Society of Testing and Materials in ASTM D388 (incorporated by reference, *see* §60.17).

(b) *Bag leak detection system* means a system that is capable of continuously monitoring relative particulate matter (dust loadings) in the exhaust of a fabric filter to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

(c) *Bituminous coal* means solid fossil fuel classified as bituminous coal by ASTM D388 (incorporated by reference— *see* §60.17).

(d) *Coal* means:

(1) For units constructed, reconstructed, or modified on or before May 27, 2009, all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D388 (incorporated by reference— *see* §60.17).

(2) For units constructed, reconstructed, or modified after May 27, 2009, all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D388 (incorporated by reference— *see* §60.17), and coal refuse.

(e) *Coal preparation and processing plant* means any facility (excluding underground mining operations) which prepares coal by one or more of the following processes: breaking, crushing, screening, wet or dry cleaning, and thermal drying.

(f) *Coal processing and conveying equipment* means any machinery used to reduce the size of coal or to separate coal from refuse, and the equipment used to convey coal to or remove coal and refuse from the machinery. This includes, but is not limited to, breakers, crushers, screens, and conveyor belts. Equipment located at the mine face is not considered to be part of the coal preparation and processing plant.

(g) *Coal refuse* means waste products of coal mining, physical coal cleaning, and coal preparation operations (*e.g.* culm, gob, *etc.*) containing coal, matrix material, clay, and other organic and inorganic material.

(h) *Coal storage system* means any facility used to store coal except for open storage piles.

(i) *Design controlled potential PM emissions rate* means the theoretical particulate matter (PM) emissions (Mg) that would result from the operation of a control device at its design emissions rate (grams per dry standard cubic meter (g/dscm)), multiplied by the maximum design flow rate (dry standard cubic meter per minute (dscm/min)), multiplied by 60 (minutes per hour (min/hr)), multiplied by 8,760 (hours per year (hr/yr)), divided by 1,000,000 (megagrams per gram (Mg/g)).

(j) *Indirect thermal dryer* means a thermal dryer that reduces the moisture content of coal through indirect heating of the coal through contact with a heat transfer medium. If the source of heat (the source of combustion or furnace) is subject to another subpart of this part, then the furnace and the associated emissions are not part of the affected facility. However, if the source of heat is not subject to another subpart of this part, then the furnace and the associated emissions are part of the affected facility.

(k) *Lignite* means coal that is classified as lignite A or B according to the American Society of Testing and Materials in ASTM D388 (incorporated by reference, *see* §60.17).

(l) *Mechanical vent* means any vent that uses a powered mechanical drive (machine) to induce air flow.

(m) *Open storage pile* means any facility, including storage area, that is not enclosed that is used to store coal, including the equipment used in the loading, unloading, and conveying operations of the facility.

(n) *Operating day* means a 24-hour period between 12 midnight and the following midnight during which coal is prepared or processed at any time by the affected facility. It is not necessary that coal be prepared or processed the entire 24-hour period.

(o) *Pneumatic coal-cleaning equipment* means:

(1) For units constructed, reconstructed, or modified on or before May 27, 2009, any facility which classifies bituminous coal by size or separates bituminous coal from refuse by application of air stream(s).

(2) For units constructed, reconstructed, or modified after May 27, 2009, any facility which classifies coal by size or separates coal from refuse by application of air stream(s).

(p) *Potential combustion concentration* means the theoretical emissions (nanograms per joule (ng/J) or pounds per million British thermal units (lb/MMBtu) heat input) that would result from combustion of a fuel in an uncleaned state without emission control systems, as determined using Method 19 of appendix A–7 of this part.

(q) *Subbituminous coal* means coal that is classified as subbituminous A, B, or C according to the American Society of Testing and Materials in ASTM D388 (incorporated by reference, *see* §60.17).

(r) *Thermal dryer* means:

(1) For units constructed, reconstructed, or modified on or before May 27, 2009, any facility in which the moisture content of bituminous coal is reduced by contact with a heated gas stream which is exhausted to the atmosphere.

(2) For units constructed, reconstructed, or modified after May 27, 2009, any facility in which the moisture content of coal is reduced by either contact with a heated gas stream which is exhausted to the atmosphere or through indirect heating of the coal through contact with a heated heat transfer medium.

(s) *Transfer and loading system* means any facility used to transfer and load coal for shipment.

§ 60.252 Standards for thermal dryers.

(a) On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of a thermal dryer constructed, reconstructed, or modified on or before April 28, 2008, subject to the provisions of this subpart must meet the requirements in paragraphs (a)(1) and (a)(2) of this section.

(1) The owner or operator shall not cause to be discharged into the atmosphere from the thermal dryer any gases which contain PM in excess of 0.070 g/dscm (0.031 grains per dry standard cubic feet (gr/dscf)); and

(2) The owner or operator shall not cause to be discharged into the atmosphere from the thermal dryer any gases which exhibit 20 percent opacity or greater.

(b) Except as provided in paragraph (c) of this section, on and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of a thermal dryer constructed, reconstructed, or modified after April 28, 2008, subject to the provisions of this subpart must meet the applicable standards for PM and opacity, as specified in paragraph (b)(1) of this section. In addition, and except as provided in paragraph (c) of this section, on and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of a thermal dryer constructed, reconstructed, or modified after May 29, 2009, subject to the provisions of this subpart must also meet the applicable standards for sulfur dioxide (SO_2), and combined nitrogen oxides (NO_X) and carbon monoxide (CO) as specified in paragraphs (b)(2) and (b)(3) of this section.

(1) The owner or operator must meet the requirements for PM emissions in paragraphs (b)(1)(i) through (iii) of this section, as applicable to the affected facility.

(i) For each thermal dryer constructed or reconstructed after April 28, 2008, the owner or operator must meet the requirements of (b)(1)(i)(A) and (b)(1)(i)(B).

(A) The owner or operator must not cause to be discharged into the atmosphere from the thermal dryer any gases that contain PM in excess of 0.023 g/dscm (0.010 grains per dry standard cubic feet (gr/dscf)); and

(B) The owner or operator must not cause to be discharged into the atmosphere from the thermal dryer any gases that exhibit 10 percent opacity or greater.

(ii) For each thermal dryer modified after April 28, 2008, the owner or operator must meet the requirements of paragraphs (b)(1)(ii)(A) and (b)(1)(ii)(B) of this section.

(A) The owner or operator must not cause to be discharged to the atmosphere from the affected facility any gases which contain PM in excess of 0.070 g/dscm (0.031 gr/dscf); and

(B) The owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 20 percent opacity or greater.

(2) Except as provided in paragraph (b)(2)(iii) of this section, for each thermal dryer constructed, reconstructed, or modified after May 27, 2009, the owner or operator must meet the requirements for SO_2emissions in either paragraph (b)(2)(i) or (b)(2)(ii) of this section.

(i) The owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2in excess of 85 ng/J (0.20 lb/MMBtu) heat input; or

(ii) The owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases that either contain SO_2in excess of 520 ng/J (1.20 lb/MMBtu) heat input or contain SO_2in excess of 10 percent of the potential combustion concentration (*i.e.,* the facility must achieve at least a 90 percent reduction of the potential combustion concentration and may not exceed a maximum emissions rate of 1.2 lb/MMBtu (520 ng/J)).

(iii) Thermal dryers that receive all of their thermal input from a source other than coal or residual oil, that receive all of their thermal input from a source subject to an SO_2limit under another subpart of this part, or that use waste heat or residual from the combustion of coal or residual oil as their only thermal input are not subject to the SO_2limits of this section.

(3) Except as provided in paragraph (b)(3)(iii) of this section, the owner or operator must meet the requirements for combined $NO_X$and CO emissions in paragraph (b)(3)(i) or (b)(3)(ii) of this section, as applicable to the affected facility.

(i) For each thermal dryer constructed after May 27, 2009, the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which contain a combined concentration of $NO_X$and CO in excess of 280 ng/J (0.65 lb/MMBtu) heat input.

(ii) For each thermal dryer reconstructed or modified after May 27, 2009, the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which contain combined concentration of $NO_X$and CO in excess of 430 ng/J (1.0 lb/MMBtu) heat input.

(iii) Thermal dryers that receive all of their thermal input from a source other than coal or residual oil, that receive all of their thermal input from a source subject to a NO_Xlimit and/or CO limit under another subpart of this part, or that use waste heat or residual from the combustion of coal or residual oil as their only thermal input, are not subject to the combined $NO_X$and CO limits of this section.

(c) Thermal dryers receiving all of their thermal input from an affected facility covered under another 40 CFR Part 60 subpart must meet the applicable requirements in that subpart but are not subject to the requirements in this subpart.

§ 60.253 Standards for pneumatic coal-cleaning equipment.

(a) On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of pneumatic coal-cleaning equipment constructed, reconstructed, or modified on or before April 28, 2008, must meet the requirements of paragraphs (a)(1) and (a)(2) of this section.

(1) The owner or operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that contain PM in excess of 0.040 g/dscm (0.017 gr/dscf); and

(2) The owner or operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that exhibit 10 percent opacity or greater.

(b) On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of pneumatic coal-cleaning equipment constructed, reconstructed, or modified after April 28, 2008, must meet the requirements in paragraphs (b)(1) and (b)(2) of this section.

(1) The owner of operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that contain PM in excess or 0.023 g/dscm (0.010 gr/dscf); and

(2) The owner or operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that exhibit greater than 5 percent opacity.

§ 60.254 Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems, and open storage piles.

(a) On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified on or before April 28, 2008, gases which exhibit 20 percent opacity or greater.

(b) On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified after April 28, 2008, must meet the requirements in paragraphs (b)(1) through (3) of this section, as applicable to the affected facility.

(1) Except as provided in paragraph (b)(3) of this section, the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 10 percent opacity or greater.

(2) The owner or operator must not cause to be discharged into the atmosphere from any mechanical vent on an affected facility gases which contain particulate matter in excess of 0.023 g/dscm (0.010 gr/dscf).

(3) Equipment used in the loading, unloading, and conveying operations of open storage piles are not subject to the opacity limitations of paragraph (b)(1) of this section.

(c) The owner or operator of an open storage pile, which includes the equipment used in the loading, unloading, and conveying operations of the affected facility, constructed, reconstructed, or modified after May 27, 2009, must prepare and operate in accordance with a submitted fugitive coal dust emissions control plan that is appropriate for the site conditions as specified in paragraphs (c)(1) through (6) of this section.

(1) The fugitive coal dust emissions control plan must identify and describe the control measures the owner or operator will use to minimize fugitive coal dust emissions from each open storage pile.

(2) For open coal storage piles, the fugitive coal dust emissions control plan must require that one or more of the following control measures be used to minimize to the greatest extent practicable fugitive coal dust: Locating the source inside a partial enclosure, installing and operating a water spray or fogging system, applying appropriate chemical dust suppression agents on the source (when the provisions of paragraph (c)(6) of this section are met), use of a wind barrier, compaction, or use of a vegetative cover. The owner or operator must select, for inclusion in the fugitive coal dust emissions control plan, the control measure or measures listed in this paragraph that are most appropriate for site conditions. The plan must also explain how the measure or measures selected are applicable and appropriate for site conditions. In addition, the plan must be revised as needed to reflect any changing conditions at the source.

(3) Any owner or operator of an affected facility that is required to have a fugitive coal dust emissions control plan may petition the Administrator to approve, for inclusion in the plan for the affected facility, alternative control measures other than those specified in paragraph (c)(2) of this section as specified in paragraphs (c)(3)(i) through (iv) of this section.

(i) The petition must include a description of the alternative control measures, a copy of the fugitive coal dust emissions control plan for the affected facility that includes the alternative control measures, and information sufficient for EPA to evaluate the demonstrations required by paragraph (c)(3)(ii) of this section.

(ii) The owner or operator must either demonstrate that the fugitive coal dust emissions control plan that includes the alternate control measures will provide equivalent overall environmental protection or demonstrate that it is either economically or technically infeasible for the affected facility to use the control measures specifically identified in paragraph (c)(2).

(iii) While the petition is pending, the owner or operator must comply with the fugitive coal dust emissions control plan including the alternative control measures submitted with the petition. Operation in accordance with the plan submitted with the petition shall be deemed to constitute compliance with the requirement to operate in accordance with a fugitive coal dust emissions control plan that contains one of the control measures specifically identified in paragraph (c)(2) of this section while the petition is pending.

(iv) If the petition is approved by the Administrator, the alternative control measures will be approved for inclusion in the fugitive coal dust emissions control plan for the affected facility. In lieu of amending this subpart, a letter will be sent to the facility describing the specific control measures approved. The facility shall make any such letters and the applicable fugitive coal dust emissions control plan available to the public. If the Administrator determines it is appropriate, the conditions and requirements of the letter can be reviewed and changed at any point.

(4) The owner or operator must submit the fugitive coal dust emissions control plan to the Administrator or delegated authority as specified in paragraphs (c)(4)(i) and (c)(4)(ii) of this section.

(i) The plan must be submitted to the Administrator or delegated authority prior to startup of the new, reconstructed, or modified affected facility, or 30 days after the effective date of this rule, whichever is later.

(ii) The plan must be revised as needed to reflect any changing conditions at the source. Such revisions must be dated and submitted to the Administrator or delegated authority before a source can operate pursuant to these revisions. The Administrator or delegated authority may also object to such revisions as specified in paragraph (c)(5) of this section.

(5) The Administrator or delegated authority may object to the fugitive coal dust emissions control plan as specified in paragraphs (c)(5)(i) and (c)(5)(ii) of this section.

(i) The Administrator or delegated authority may object to any fugitive coal dust emissions control plan that it has determined does not meet the requirements of paragraphs (c)(1) and (c)(2) of this section.

(ii) If an objection is raised, the owner or operator, within 30 days from receipt of the objection, must submit a revised fugitive coal dust emissions control plan to the Administrator or delegated authority. The owner or operator must operate in accordance with the revised fugitive coal dust emissions control plan. The Administrator or delegated authority retain the right, under paragraph (c)(5) of this section, to object to the revised control plan if it determines the plan does not meet the requirements of paragraphs (c)(1) and (c)(2) of this section.

(6) Where appropriate chemical dust suppression agents are selected by the owner or operator as a control measure to minimize fugitive coal dust emissions, (1) only chemical dust suppressants with Occupational Safety and Health Administration (OSHA)-compliant material safety data sheets (MSDS) are to be allowed; (2) the MSDS must be included in the fugitive coal dust emissions control plan; and (3) the owner or operator must consider and document in the fugitive coal dust emissions control plan the site-specific impacts associated with the use of such chemical dust suppressants.

§ 60.255 Performance tests and other compliance requirements.

(a) An owner or operator of each affected facility that commenced construction, reconstruction, or modification on or before April 28, 2008, must conduct all performance tests required by §60.8 to demonstrate compliance with the applicable emission standards using the methods identified in §60.257.

(b) An owner or operator of each affected facility that commenced construction, reconstruction, or modification after April 28, 2008, must conduct performance tests according to the requirements of §60.8 and the methods identified in §60.257 to demonstrate compliance with the applicable emissions standards in this subpart as specified in paragraphs (b)(1) and (2) of this section.

(1) For each affected facility subject to a PM, SO_2, or combined $NO_X$and CO emissions standard, an initial performance test must be performed. Thereafter, a new performance test must be conducted according the requirements in paragraphs (b)(1)(i) through (iii) of this section, as applicable.

(i) If the results of the most recent performance test demonstrate that emissions from the affected facility are greater than 50 percent of the applicable emissions standard, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed.

(ii) If the results of the most recent performance test demonstrate that emissions from the affected facility are 50 percent or less of the applicable emissions standard, a new performance test must be conducted within 24 calendar months of the date that the previous performance test was required to be completed.

(iii) An owner or operator of an affected facility that has not operated for the 60 calendar days prior to the due date of a performance test is not required to perform the subsequent performance test until 30 calendar days after the next operating day.

(2) For each affected facility subject to an opacity standard, an initial performance test must be performed. Thereafter, a new performance test must be conducted according to the requirements in paragraphs (b)(2)(i) through (iii) of this section, as applicable, except as provided for in paragraphs (e) and (f) of this section. Performance test and other compliance requirements for coal truck dump operations are specified in paragraph (h) of this section.

(i) If any 6-minute average opacity reading in the most recent performance test exceeds half the applicable opacity limit, a new performance test must be conducted within 90 operating days of the date that the previous performance test was required to be completed.

(ii) If all 6-minute average opacity readings in the most recent performance test are equal to or less than half the applicable opacity limit, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed.

(iii) An owner or operator of an affected facility continuously monitoring scrubber parameters as specified in §60.256(b)(2) is exempt from the requirements in paragraphs (b)(2)(i) and (ii) if opacity performance tests are conducted concurrently with (or within a 60-minute period of) PM performance tests.

(c) If any affected coal processing and conveying equipment (*e.g.,* breakers, crushers, screens, conveying systems), coal storage systems, or coal transfer and loading systems that commenced construction, reconstruction, or modification after April 28, 2008, are enclosed in a building, and emissions from the building do not exceed any of the standards in *§* 60.254 that apply to the affected facility, then the facility shall be deemed to be in compliance with such standards.

(d) An owner or operator of an affected facility (other than a thermal dryer) that commenced construction, reconstruction, or modification after April 28, 2008, is subject to a PM emission standard and uses a control device with a design controlled potential PM emissions rate of 1.0 Mg (1.1 tons) per year or less is exempted from the requirements of paragraphs (b)(1)(i) and (ii) of this section provided that the owner or operator meets all of the conditions specified in paragraphs (d)(1) through (3) of this section. This exemption does not apply to thermal dryers.

(1) PM emissions, as determined by the most recent performance test, are less than or equal to the applicable limit,

(2) The control device manufacturer's recommended maintenance procedures are followed, and

(3) All 6-minute average opacity readings from the most recent performance test are equal to or less than half the applicable opacity limit or the monitoring requirements in paragraphs (e) or (f) of this section are followed.

(e) For an owner or operator of a group of up to five of the same type of affected facilities that commenced construction, reconstruction, or modification after April 28, 2008, that are subject to PM emissions standards and use identical control devices, the Administrator or delegated authority may allow the owner or operator to use a single PM performance test for one of the affected control devices to demonstrate that the group of affected facilities is in compliance with the applicable emissions standards

provided that the owner or operator meets all of the conditions specified in paragraphs (e)(1) through (3) of this section.

(1) PM emissions from the most recent performance test for each individual affected facility are 90 percent or less of the applicable PM standard;

(2) The manufacturer's recommended maintenance procedures are followed for each control device; and

(3) A performance test is conducted on each affected facility at least once every 5 calendar years.

(f) As an alternative to meeting the requirements in paragraph (b)(2) of this section, an owner or operator of an affected facility that commenced construction, reconstruction, or modification after April 28, 2008, may elect to comply with the requirements in paragraph (f)(1) or (f)(2) of this section.

(1) Monitor visible emissions from each affected facility according to the requirements in paragraphs (f)(1)(i) through (iii) of this section.

(i) Conduct one daily 15-second observation each operating day for each affected facility (during normal operation) when the coal preparation and processing plant is in operation. Each observation must be recorded as either visible emissions observed or no visible emissions observed. Each observer determining the presence of visible emissions must meet the training requirements specified in §2.3 of Method 22 of appendix A–7 of this part. If visible emissions are observed during any 15-second observation, the owner or operator must adjust the operation of the affected facility and demonstrate within 24 hours that no visible emissions are observed from the affected facility. If visible emissions are observed, a Method 9, of appendix A–4 of this part, performance test must be conducted within 45 operating days.

(ii) Conduct monthly visual observations of all process and control equipment. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible.

(iii) Conduct a performance test using Method 9 of appendix A–4 of this part at least once every 5 calendar years for each affected facility.

(2) Prepare a written site-specific monitoring plan for a digital opacity compliance system for approval by the Administrator or delegated authority. The plan shall require observations of at least one digital image every 15 seconds for 10-minute periods (during normal operation) every operating day. An approvable monitoring plan must include a demonstration that the occurrences of visible emissions are not in excess of 5 percent of the observation period. For reference purposes in preparing the monitoring plan, *see* OAQPS “Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems.” This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Group (D243–02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods. The monitoring plan approved by the Administrator or delegated authority shall be implemented by the owner or operator.

(g) As an alternative to meeting the requirements in paragraph (b)(2) of this section, an owner or operator of an affected facility that commenced construction, reconstruction, or modification after April 28, 2008, subject to a visible emissions standard under this subpart may install, operate, and maintain a continuous opacity monitoring system (COMS). Each COMS used to comply with provisions of this subpart must be installed, calibrated, maintained, and continuously operated according to the requirements in paragraphs (g)(1) and (2) of this section.

(1) The COMS must meet Performance Specification 1 in 40 CFR part 60, appendix B.

(2) The COMS must comply with the quality assurance requirements in paragraphs (g)(2)(i) through (v) of this section.

(i) The owner or operator must automatically (intrinsic to the opacity monitor) check the zero and upscale (span) calibration drifts at least once daily. For particular COMS, the acceptable range of zero and upscale calibration materials is as defined in the applicable version of Performance Specification 1 in 40 CFR part 60, appendix B.

(ii) The owner or operator must adjust the zero and span whenever the 24-hour zero drift or 24-hour span drift exceeds 4 percent opacity. The COMS must allow for the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified. The optical surfaces exposed to the effluent gases must be cleaned prior to performing the zero and span drift adjustments, except for systems using automatic zero adjustments. For systems using automatic zero adjustments, the optical surfaces must be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

(iii) The owner or operator must apply a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. All procedures applied must provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photodetector assembly.

(iv) Except during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments, the COMS must be in continuous operation and must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(v) The owner or operator must reduce all data from the COMS to 6-minute averages. Six-minute opacity averages must be calculated from 36 or more data points equally spaced over each 6-minute period. Data recorded during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments must not be included in the data averages. An arithmetic or integrated average of all data may be used.

(h) The owner or operator of each affected coal truck dump operation that commenced construction, reconstruction, or modification after April 28, 2008, must meet the requirements specified in paragraphs (h)(1) through (3) of this section.

(1) Conduct an initial performance test using Method 9 of appendix A–4 of this part according to the requirements in paragraphs (h)(1)(i) and(ii).

(i) Opacity readings shall be taken during the duration of three separate truck dump events. Each truck dump event commences when the truck bed begins to elevate and concludes when the truck bed returns to a horizontal position.

(ii) Compliance with the applicable opacity limit is determined by averaging all 15-second opacity readings made during the duration of three separate truck dump events.

(2) Conduct monthly visual observations of all process and control equipment. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible.

(3) Conduct a performance test using Method 9 of appendix A–4 of this part at least once every 5 calendar years for each affected facility.

§ 60.256 Continuous monitoring requirements.

(a) The owner or operator of each affected facility constructed, reconstructed, or modified on or before April 28, 2008, must meet the monitoring requirements specified in paragraphs (a)(1) and (2) of this section, as applicable to the affected facility.

(1) The owner or operator of any thermal dryer shall install, calibrate, maintain, and continuously operate monitoring devices as follows:

(i) A monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within ±1.7 °C (±3 °F).

(ii) For affected facilities that use wet scrubber emission control equipment:

(A) A monitoring device for the continuous measurement of the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±1 inch water gauge.

(B) A monitoring device for the continuous measurement of the water supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±5 percent of design water supply pressure. The pressure sensor or tap must be located close to the water discharge point. The Administrator shall have discretion to grant requests for approval of alternative monitoring locations.

(2) All monitoring devices under paragraph (a) of this section are to be recalibrated annually in accordance with procedures under §60.13(b).

(b) The owner or operator of each affected facility constructed, reconstructed, or modified after April 28, 2008, that has one or more mechanical vents must install, calibrate, maintain, and continuously operate the monitoring devices specified in paragraphs (b)(1) through (3) of this section, as applicable to the mechanical vent and any control device installed on the vent.

(1) For mechanical vents with fabric filters (baghouses) with design controlled potential PM emissions rates of 25 Mg (28 tons) per year or more, a bag leak detection system according to the requirements in paragraph (c) of this section.

(2) For mechanical vents with wet scrubbers, monitoring devices according to the requirements in paragraphs (b)(2)(i) through (iv) of this section.

(i) A monitoring device for the continuous measurement of the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±1 inch water gauge.

(ii) A monitoring device for the continuous measurement of the water supply flow rate to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±5 percent of design water supply flow rate.

(iii) A monitoring device for the continuous measurement of the pH of the wet scrubber liquid. The monitoring device is to be certified by the manufacturer to be accurate within ±5 percent of design pH.

(iv) An average value for each monitoring parameter must be determined during each performance test. Each monitoring parameter must then be maintained within 10 percent of the value established during the most recent performance test on an operating day average basis.

(3) For mechanical vents with control equipment other than wet scrubbers, a monitoring device for the continuous measurement of the reagent injection flow rate to the control equipment, as applicable. The monitoring device is to be certified by the manufacturer to be accurate within ±5 percent of design injection flow rate. An average reagent injection flow rate value must be determined during each performance test. The reagent injection flow rate must then be maintained within 10 percent of the value established during the most recent performance test on an operating day average basis.

(c) Each bag leak detection system used to comply with provisions of this subpart must be installed, calibrated, maintained, and continuously operated according to the requirements in paragraphs (c)(1) through (3) of this section.

(1) The bag leak detection system must meet the specifications and requirements in paragraphs (c)(1)(i) through (viii) of this section.

(i) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per dry standard cubic meter (mg/dscm) (0.00044 grains per actual cubic foot (gr/acf)) or less.

(ii) The bag leak detection system sensor must provide output of relative PM loadings. The owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (*e.g.,* using a strip chart recorder or a data logger).

(iii) The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph (c)(1)(iv) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(iv) In the initial adjustment of the bag leak detection system, the owner or operator must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.

(v) Following initial adjustment, the owner or operator must not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided in paragraph (c)(2)(vi) of this section.

(vi) Once per quarter, the owner or operator may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required by paragraph (c)(2) of this section.

(vii) The owner or operator must install the bag leak detection sensor downstream of the fabric filter.

(viii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(2) The owner or operator must develop and submit to the Administrator or delegated authority for approval a site-specific monitoring plan for each bag leak detection system. This plan must be submitted to the Administrator or delegated authority 30 days prior to startup of the affected facility. The owner or operator must operate and maintain the bag leak detection system according to the site-specific

monitoring plan at all times. Each monitoring plan must describe the items in paragraphs (c)(2)(i) through (vi) of this section.

(i) Installation of the bag leak detection system;

(ii) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established;

(iii) Operation of the bag leak detection system, including quality assurance procedures;

(iv) How the bag leak detection system will be maintained, including a routine maintenance schedule and spare parts inventory list;

(v) How the bag leak detection system output will be recorded and stored; and

(vi) Corrective action procedures as specified in paragraph (c)(3) of this section. In approving the site-specific monitoring plan, the Administrator or delegated authority may allow the owner and operator more than 3 hours to alleviate a specific condition that causes an alarm if the owner or operator identifies in the monitoring plan this specific condition as one that could lead to an alarm, adequately explains why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and demonstrates that the requested time will ensure alleviation of this condition as expeditiously as practicable.

(3) For each bag leak detection system, the owner or operator must initiate procedures to determine the cause of every alarm within 1 hour of the alarm. Except as provided in paragraph (c)(2)(vi) of this section, the owner or operator must alleviate the cause of the alarm within 3 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:

(i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions;

(ii) Sealing off defective bags or filter media;

(iii) Replacing defective bags or filter media or otherwise repairing the control device;

(iv) Sealing off a defective fabric filter compartment;

(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or

(vi) Shutting down the process producing the PM emissions.

§ 60.257 Test methods and procedures.

(a) The owner or operator must determine compliance with the applicable opacity standards as specified in paragraphs (a)(1) through (3) of this section.

(1) Method 9 of appendix A–4 of this part and the procedures in §60.11 must be used to determine opacity, with the exceptions specified in paragraphs (a)(1)(i) and (ii).

(i) The duration of the Method 9 of appendix A–4 of this part performance test shall be 1 hour (ten 6-minute averages).

(ii) If, during the initial 30 minutes of the observation of a Method 9 of appendix A–4 of this part performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes.

(2) To determine opacity for fugitive coal dust emissions sources, the additional requirements specified in paragraphs (a)(2)(i) through (iii) must be used.

(i) The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back.

(ii) The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction.

(iii) The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission.

(3) A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified in paragraphs (a)(3)(i) through (iii) of this section are met.

(i) No more than three emissions points may be read concurrently.

(ii) All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.

(iii) If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point.

(b) The owner or operator must conduct all performance tests required by §60.8 to demonstrate compliance with the applicable emissions standards specified in §60.252 according to the requirements in §60.8 using the applicable test methods and procedures in paragraphs (b)(1) through (8) of this section.

(1) Method 1 or 1A of appendix A–4 of this part shall be used to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

(2) Method 2, 2A, 2C, 2D, 2F, or 2G of appendix A–4 of this part shall be used to determine the volumetric flow rate of the stack gas.

(3) Method 3, 3A, or 3B of appendix A–4 of this part shall be used to determine the dry molecular weight of the stack gas. The owner or operator may use ANSI/ASME PTC 19.10–1981, “Flue and Exhaust Gas Analyses (incorporated by reference— *see* §60.17) as an alternative to Method 3B of appendix A–2 of this part.

(4) Method 4 of appendix A–4 of this part shall be used to determine the moisture content of the stack gas.

(5) Method 5, 5B or 5D of appendix A–4 of this part or Method 17 of appendix A–7 of this part shall be used to determine the PM concentration as follows:

(i) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). Sampling shall begin no less than 30 minutes after startup and shall terminate before shutdown procedures begin. A minimum of three valid test runs are needed to comprise a PM performance test.

(ii) Method 5 of appendix A of this part shall be used only to test emissions from affected facilities without wet flue gas desulfurization (FGD) systems.

(iii) Method 5B of appendix A of this part is to be used only after wet FGD systems.

(iv) Method 5D of appendix A–4 of this part shall be used for positive pressure fabric filters and other similar applications (*e.g.,* stub stacks and roof vents).

(v) Method 17 of appendix A–6 of this part may be used at facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of sections 8.1 and 11.1 of Method 5B of appendix A–3 of this part may be used in Method 17 of appendix A–6 of this part only if it is used after a wet FGD system. Do not use Method 17 of appendix A–6 of this part after wet FGD systems if the effluent is saturated or laden with water droplets.

(6) Method 6, 6A, or 6C of appendix A–4 of this part shall be used to determine the SO_2concentration. A minimum of three valid test runs are needed to comprise an SO_2performance test.

(7) Method 7 or 7E of appendix A–4 of this part shall be used to determine the NO_Xconcentration. A minimum of three valid test runs are needed to comprise an NO_Xperformance test.

(8) Method 10 of appendix A–4 of this part shall be used to determine the CO concentration. A minimum of three valid test runs are needed to comprise a CO performance test. CO performance tests are conducted concurrently (or within a 60-minute period) with NO_Xperformance tests.

§ 60.258 Reporting and recordkeeping.

(a) The owner or operator of a coal preparation and processing plant that commenced construction, reconstruction, or modification after April 28, 2008, shall maintain in a logbook (written or electronic) on-site and make it available upon request. The logbook shall record the following:

(1) The manufacturer's recommended maintenance procedures and the date and time of any maintenance and inspection activities and the results of those activities. Any variance from manufacturer recommendation, if any, shall be noted.

(2) The date and time of periodic coal preparation and processing plant visual observations, noting those sources with visible emissions along with corrective actions taken to reduce visible emissions. Results from the actions shall be noted.

(3) The amount and type of coal processed each calendar month.

(4) The amount of chemical stabilizer or water purchased for use in the coal preparation and processing plant.

(5) Monthly certification that the dust suppressant systems were operational when any coal was processed and that manufacturer's recommendations were followed for all control systems. Any variance from the manufacturer's recommendations, if any, shall be noted.

(6) Monthly certification that the fugitive coal dust emissions control plan was implemented as described. Any variance from the plan, if any, shall be noted. A copy of the applicable fugitive coal dust emissions control plan and any letters from the Administrator providing approval of any alternative control measures shall be maintained with the logbook. Any actions, *e.g.* objections, to the plan and any actions relative to the alternative control measures, *e.g.* approvals, shall be noted in the logbook as well.

(7) For each bag leak detection system, the owner or operator must keep the records specified in paragraphs (a)(7)(i) through (iii) of this section.

(i) Records of the bag leak detection system output;

(ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection settings; and

(iii) The date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and whether the cause of the alarm was alleviated within 3 hours of the alarm.

(8) A copy of any applicable monitoring plan for a digital opacity compliance system and monthly certification that the plan was implemented as described. Any variance from plan, if any, shall be noted.

(9) During a performance test of a wet scrubber, and each operating day thereafter, the owner or operator shall record the measurements of the scrubber pressure loss, water supply flow rate, and pH of the wet scrubber liquid.

(10) During a performance test of control equipment other than a wet scrubber, and each operating day thereafter, the owner or operator shall record the measurements of the reagent injection flow rate, as applicable.

(b) For the purpose of reports required under section 60.7(c), any owner operator subject to the provisions of this subpart also shall report semiannually periods of excess emissions as follow:

(1) The owner or operator of an affected facility with a wet scrubber shall submit semiannual reports to the Administrator or delegated authority of occurrences when the measurements of the scrubber pressure loss, water supply flow rate, or pH of the wet scrubber liquid vary by more than 10 percent from the average determined during the most recent performance test.

(2) The owner or operator of an affected facility with control equipment other than a wet scrubber shall submit semiannual reports to the Administrator or delegated authority of occurrences when the measurements of the reagent injection flow rate, as applicable, vary by more than 10 percent from the average determined during the most recent performance test.

(3) All 6-minute average opacities that exceed the applicable standard.

(c) The owner or operator of an affected facility shall submit the results of initial performance tests to the Administrator or delegated authority, consistent with the provisions of section 60.8. The owner or operator who elects to comply with the reduced performance testing provisions of sections 60.255(c) or (d) shall include in the performance test report identification of each affected facility that will be subject to the reduced testing. The owner or operator electing to comply with section 60.255(d) shall also include information which demonstrates that the control devices are identical.

(d) After July 1, 2011, within 60 days after the date of completing each performance evaluation conducted to demonstrate compliance with this subpart, the owner or operator of the affected facility must submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main. For performance tests that cannot be entered into WebFIRE (i.e., Method 9 of appendix A–4 of this part opacity performance tests) the owner or operator of the affected facility must mail a summary copy to United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243–01; RTP, NC 27711.

Indiana Department of Environmental Management
Office of Air Quality

Attachment D

Subpart IIII—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Source: 71 FR 39172, July 11, 2006, unless otherwise noted.

What This Subpart Covers

§ 60.4200 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:

(i) 2007 or later, for engines that are not fire pump engines,

(ii) The model year listed in table 3 to this subpart or later model year, for fire pump engines.

(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005 where the stationary CI ICE are:

(i) Manufactured after April 1, 2006 and are not fire pump engines, or

(ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

(3) Owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005.

(b) The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.

(c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

(d) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89, subpart J and 40 CFR part 94, subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

Emission Standards for Manufacturers

§ 60.4201 What emission standards must I meet for non-emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same model year and maximum engine power.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 through 2010 model year non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(c) Stationary CI internal combustion engine manufacturers must certify their 2011 model year and later non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same maximum engine power.

(d) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power.

§ 60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

(1) For engines with a maximum engine power less than 37 KW (50 HP):

(i) The certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants for model year 2007 engines, and

(ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and table 2 to this subpart, for 2008 model year and later engines.

(2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a

displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (b)(1) through (2) of this section.

(1) For 2007 through 2010 model years, the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(2) For 2011 model year and later, the certification emission standards for new nonroad CI engines for engines of the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants.

(c) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power.

(d) Beginning with the model years in table 3 to this subpart, stationary CI internal combustion engine manufacturers must certify their fire pump stationary CI ICE to the emission standards in table 4 to this subpart, for all pollutants, for the same model year and NFPA nameplate power.

§ 60.4203 How long must my engines meet the emission standards if I am a stationary CI internal combustion engine manufacturer?

Engines manufactured by stationary CI internal combustion engine manufacturers must meet the emission standards as required in §§60.4201 and 60.4202 during the useful life of the engines.

Emission Standards for Owners and Operators

§ 60.4204 What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder must comply with the emission standards in table 1 to this subpart. Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in §60.4201 for their 2007 model year and later stationary CI ICE, as applicable.

(c) Owners and operators of non-emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in paragraphs (c)(1) and (2) of this section.

(1) Reduce nitrogen oxides (NO_X) emissions by 90 percent or more, or limit the emissions of NO_Xin the stationary CI internal combustion engine exhaust to 1.6 grams per KW-hour (g/KW-hr) (1.2 grams per HP-hour (g/HP-hr)).

(2) Reduce particulate matter (PM) emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).

§ 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in table 1 to this subpart. Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

(c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.

(d) Owners and operators of emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in paragraphs (d)(1) and (2) of this section.

(1) Reduce NO_Xemissions by 90 percent or more, or limit the emissions of NO_Xin the stationary CI internal combustion engine exhaust to 1.6 grams per KW-hour (1.2 grams per HP-hour).

(2) Reduce PM emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).

§ 60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§60.4204 and 60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

Fuel Requirements for Owners and Operators

§ 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

(c) Owners and operators of pre-2011 model year stationary CI ICE subject to this subpart may petition the Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of paragraphs (a) and (b) of this section beyond the dates required for the purpose of using up existing fuel inventories. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Administrator.

(d) Owners and operators of pre-2011 model year stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the Federal Aid Highway System may petition the Administrator for approval to use any fuels mixed with used lubricating oil that do not meet the fuel requirements of paragraphs (a) and (b) of this section. Owners and operators must demonstrate in their petition to the Administrator that there is no other place to use the lubricating oil. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Administrator.

(e) Stationary CI ICE that have a national security exemption under §60.4200(d) are also exempt from the fuel requirements in this section.

Other Requirements for Owners and Operators

§ 60.4208 What is the deadline for importing or installing stationary CI ICE produced in the previous model year?

(a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.

(b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.

(c) After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.

(d) After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.

(e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.

(f) After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 model year non-emergency engines.

(g) In addition to the requirements specified in §§60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (f) of this section after the dates specified in paragraphs (a) through (f) of this section.

(h) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

§ 60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in §60.4211.

(a) If you are an owner or operator of an emergency stationary CI internal combustion engine, you must install a non-resettable hour meter prior to startup of the engine.

(b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in §60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

Compliance Requirements

§ 60.4210 What are my compliance requirements if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of less than 10 liters per cylinder to the emission standards specified in §60.4201(a) through (c) and §60.4202(a), (b) and (d) using the certification procedures required in 40 CFR part 89, subpart B, or 40 CFR part 1039, subpart C, as applicable, and must test their engines as specified in those parts. For the purposes of this subpart, engines certified to the standards in table 1 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89. For the purposes of this subpart, engines certified to the standards in table 4 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89, except that engines with NFPA nameplate power of less than 37 KW (50 HP) certified to model year 2011 or later standards shall be subject to the same requirements as engines certified to the standards in 40 CFR part 1039.

(b) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder to the emission standards specified in §60.4201(d) and §60.4202(c) using the certification procedures required in 40 CFR part 94 subpart C, and must test their engines as specified in 40 CFR part 94.

(c) Stationary CI internal combustion engine manufacturers must meet the requirements of 40 CFR 1039.120, 40 CFR 1039.125, 40 CFR 1039.130, 40 CFR 1039.135, and 40 CFR part 1068 for engines that are certified to the emission standards in 40 CFR part 1039. Stationary CI internal combustion engine manufacturers must meet the corresponding provisions of 40 CFR part 89 or 40 CFR part 94 for engines that would be covered by that part if they were nonroad (including marine) engines. Labels on such engines must refer to stationary engines, rather than or in addition to nonroad or marine engines, as appropriate. Stationary CI internal combustion engine manufacturers must label their engines according to paragraphs (c)(1) through (3) of this section.

(1) Stationary CI internal combustion engines manufactured from January 1, 2006 to March 31, 2006 (January 1, 2006 to June 30, 2006 for fire pump engines), other than those that are part of certified engine families under the nonroad CI engine regulations, must be labeled according to 40 CFR 1039.20.

(2) Stationary CI internal combustion engines manufactured from April 1, 2006 to December 31, 2006 (or, for fire pump engines, July 1, 2006 to December 31 of the year preceding the year listed in table 3 to this subpart) must be labeled according to paragraphs (c)(2)(i) through (iii) of this section:

(i) Stationary CI internal combustion engines that are part of certified engine families under the nonroad regulations must meet the labeling requirements for nonroad CI engines, but do not have to meet the labeling requirements in 40 CFR 1039.20.

(ii) Stationary CI internal combustion engines that meet Tier 1 requirements (or requirements for fire pumps) under this subpart, but do not meet the requirements applicable to nonroad CI engines must be

labeled according to 40 CFR 1039.20. The engine manufacturer may add language to the label clarifying that the engine meets Tier 1 requirements (or requirements for fire pumps) of this subpart.

(iii) Stationary CI internal combustion engines manufactured after April 1, 2006 that do not meet Tier 1 requirements of this subpart, or fire pumps engines manufactured after July 1, 2006 that do not meet the requirements for fire pumps under this subpart, may not be used in the U.S. If any such engines are manufactured in the U.S. after April 1, 2006 (July 1, 2006 for fire pump engines), they must be exported or must be brought into compliance with the appropriate standards prior to initial operation. The export provisions of 40 CFR 1068.230 would apply to engines for export and the manufacturers must label such engines according to 40 CFR 1068.230.

(3) Stationary CI internal combustion engines manufactured after January 1, 2007 (for fire pump engines, after January 1 of the year listed in table 3 to this subpart, as applicable) must be labeled according to paragraphs (c)(3)(i) through (iii) of this section.

(i) Stationary CI internal combustion engines that meet the requirements of this subpart and the corresponding requirements for nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in part 89, 94 or 1039, as appropriate.

(ii) Stationary CI internal combustion engines that meet the requirements of this subpart, but are not certified to the standards applicable to nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in part 89, 94 or 1039, as appropriate, but the words “stationary” must be included instead of “nonroad” or “marine” on the label. In addition, such engines must be labeled according to 40 CFR 1039.20.

(iii) Stationary CI internal combustion engines that do not meet the requirements of this subpart must be labeled according to 40 CFR 1068.230 and must be exported under the provisions of 40 CFR 1068.230.

(d) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under parts 89, 94, or 1039 for that model year may certify any such family that contains both nonroad (including marine) and stationary engines as a single engine family and/or may include any such family containing stationary engines in the averaging, banking and trading provisions applicable for such engines under those parts.

(e) Manufacturers of engine families discussed in paragraph (d) of this section may meet the labeling requirements referred to in paragraph (c) of this section for stationary CI ICE by either adding a separate label containing the information required in paragraph (c) of this section or by adding the words “and stationary” after the word “nonroad” or “marine,” as appropriate, to the label.

(f) Starting with the model years shown in table 5 to this subpart, stationary CI internal combustion engine manufacturers must add a permanent label stating that the engine is for stationary emergency use only to each new emergency stationary CI internal combustion engine greater than or equal to 19 KW (25 HP) that meets all the emission standards for emergency engines in §60.4202 but does not meet all the emission standards for non-emergency engines in §60.4201. The label must be added according to the labeling requirements specified in 40 CFR 1039.135(b). Engine manufacturers must specify in the owner's manual that operation of emergency engines is limited to emergency operations and required maintenance and testing.

(g) Manufacturers of fire pump engines may use the test cycle in table 6 to this subpart for testing fire pump engines and may test at the NFPA certified nameplate HP, provided that the engine is labeled as “Fire Pump Applications Only”.

(h) Engine manufacturers, including importers, may introduce into commerce uncertified engines or engines certified to earlier standards that were manufactured before the new or changed standards took effect until inventories are depleted, as long as such engines are part of normal inventory. For example, if the engine manufacturers' normal industry practice is to keep on hand a one-month supply of engines based on its projected sales, and a new tier of standards starts to apply for the 2009 model year, the engine manufacturer may manufacture engines based on the normal inventory requirements late in the 2008 model year, and sell those engines for installation. The engine manufacturer may not circumvent the provisions of §§60.4201 or 60.4202 by stockpiling engines that are built before new or changed standards take effect. Stockpiling of such engines beyond normal industry practice is a violation of this subpart.

(i) The replacement engine provisions of 40 CFR 89.1003(b)(7), 40 CFR 94.1103(b)(3), 40 CFR 94.1103(b)(4) and 40 CFR 1068.240 are applicable to stationary CI engines replacing existing equipment that is less than 15 years old.

§ 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

(b) If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in §§60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.

(1) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

(3) Keeping records of engine manufacturer data indicating compliance with the standards.

(4) Keeping records of control device vendor data indicating compliance with the standards.

(5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in §60.4212, as applicable.

(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications.

(d) If you are an owner or operator and must comply with the emission standards specified in §60.4204(c) or §60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section.

(1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in §60.4213.

(2) Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.

(i) Identification of the specific parameters you propose to monitor continuously;

(ii) A discussion of the relationship between these parameters and $NO_X$and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit $NO_X$and PM emissions;

(iii) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(iv) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(3) For non-emergency engines with a displacement of greater than or equal to 30 liters per cylinder, conducting annual performance tests to demonstrate continuous compliance with the emission standards as specified in §60.4213.

(e) Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. For owners and operators of emergency engines meeting standards under §60.4205 but not §60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.

Testing Requirements for Owners and Operators

§ 60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (d) of this section.

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F.

(b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.

(c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

$$\text{NTE requirement for each pollutant} = (1.25) \times (\text{STD}) \qquad \text{(Eq. 1)}$$

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate.

(d) Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in §60.4204(a), §60.4205(a), or §60.4205(c), determined from the equation in paragraph (c) of this section.

Where:

STD = The standard specified for that pollutant in §60.4204(a), §60.4205(a), or §60.4205(c).

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) may follow the testing procedures specified in §60.4213, as appropriate.

§ 60.4213 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of greater than or equal to 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests according to paragraphs (a) through (d) of this section.

(a) Each performance test must be conducted according to the requirements in §60.8 and under the specific conditions that this subpart specifies in table 7. The test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c).

(c) You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must last at least 1 hour.

(d) To determine compliance with the percent reduction requirement, you must follow the requirements as specified in paragraphs (d)(1) through (3) of this section.

(1) You must use Equation 2 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad \text{(Eq. 2)}$$

Where:

C_i= concentration of NO_Xor PM at the control device inlet,

C_o= concentration of NO_Xor PM at the control device outlet, and

R = percent reduction of NO_Xor PM emissions.

(2) You must normalize the NO_Xor PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen (O_2) using Equation 3 of this section, or an equivalent percent carbon dioxide (CO_2) using the procedures described in paragraph (d)(3) of this section.

$$C_{adj} = C_d \frac{5.9}{20.9 - \% O_2} \qquad \text{(Eq. 3)}$$

Where:

C_{adj}= Calculated NO_Xor PM concentration adjusted to 15 percent O_2.

C_d= Measured concentration of NO_Xor PM, uncorrected.

5.9 = 20.9 percent O_2−15 percent O_2, the defined O_2correction value, percent.

$\%O_2$= Measured O_2concentration, dry basis, percent.

(3) If pollutant concentrations are to be corrected to 15 percent $O_2$and CO_2concentration is measured in lieu of O_2concentration measurement, a CO_2correction factor is needed. Calculate the CO_2correction factor as described in paragraphs (d)(3)(i) through (iii) of this section.

(i) Calculate the fuel-specific $F_o$value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209_{H}}{F_c} \qquad \text{(Eq. 4)}$$

Where:

F_o= Fuel factor based on the ratio of O_2volume to the ultimate CO_2volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is O_2, percent/100.

F_d= Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3 /J (dscf/10^6 Btu).

F_c= Ratio of the volume of CO_2produced to the gross calorific value of the fuel from Method 19, dsm^3 /J (dscf/10^6 Btu).

(ii) Calculate the CO_2correction factor for correcting measurement data to 15 percent O_2, as follows:

$$X_{CO_2} = \frac{5.9}{F_o} \qquad \text{(Eq. 5)}$$

Where:

X_{CO2}= CO_2correction factor, percent.

5.9 = 20.9 percent O_2−15 percent O_2, the defined O_2correction value, percent.

(iii) Calculate the $NO_X$and PM gas concentrations adjusted to 15 percent O_2using CO_2as follows:

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \qquad \text{(Eq. 6)}$$

Where:

C_{adj}= Calculated NO_Xor PM concentration adjusted to 15 percent O_2.

C_d= Measured concentration of NO_Xor PM, uncorrected.

$\%CO_2$= Measured CO_2concentration, dry basis, percent.

(e) To determine compliance with the NO_Xmass per unit output emission limitation, convert the concentration of NO_Xin the engine exhaust using Equation 7 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{\text{KW-hour}} \qquad \text{(Eq. 7)}$$

Where:

ER = Emission rate in grams per KW-hour.

C_d= Measured NO_Xconcentration in ppm.

1.912×10^{-3}= Conversion constant for ppm $NO_X$to grams per standard cubic meter at 25 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Brake work of the engine, in KW-hour.

(f) To determine compliance with the PM mass per unit output emission limitation, convert the concentration of PM in the engine exhaust using Equation 8 of this section:

$$ER = \frac{C_{adj} \times Q \times T}{\text{KW-hour}} \qquad (Eq. 8)$$

Where:

ER = Emission rate in grams per KW-hour.

C_{adj}= Calculated PM concentration in grams per standard cubic meter.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Energy output of the engine, in KW.

Notification, Reports, and Records for Owners and Operators

§ 60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section.

(1) Submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (a)(1)(i) through (v) of this section.

(i) Name and address of the owner or operator;

(ii) The address of the affected source;

(iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(iv) Emission control equipment; and

(v) Fuel used.

(2) Keep records of the information in paragraphs (a)(2)(i) through (iv) of this section.

(i) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(ii) Maintenance conducted on the engine.

(iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.

(iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

(c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

Special Requirements

§ 60.4215 What requirements must I meet for engines used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands?

(a) Stationary CI ICE that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the applicable emission standards in §60.4205. Non-emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder, must meet the applicable emission standards in §60.4204(c).

(b) Stationary CI ICE that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are not required to meet the fuel requirements in §60.4207.

§ 60.4216 What requirements must I meet for engines used in Alaska?

(a) Prior to December 1, 2010, owners and operators of stationary CI engines located in areas of Alaska not accessible by the Federal Aid Highway System should refer to 40 CFR part 69 to determine the diesel fuel requirements applicable to such engines.

(b) The Governor of Alaska may submit for EPA approval, by no later than January 11, 2008, an alternative plan for implementing the requirements of 40 CFR part 60, subpart IIII, for public-sector electrical utilities located in rural areas of Alaska not accessible by the Federal Aid Highway System. This alternative plan must be based on the requirements of section 111 of the Clean Air Act including any increased risks to human health and the environment and must also be based on the unique circumstances related to remote power generation, climatic conditions, and serious economic impacts resulting from implementation of 40 CFR part 60, subpart IIII. If EPA approves by rulemaking process an alternative plan, the provisions as approved by EPA under that plan shall apply to the diesel engines used in new stationary internal combustion engines subject to this paragraph.

§ 60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?

(a) Owners and operators of stationary CI ICE that do not use diesel fuel, or who have been given authority by the Administrator under §60.4207(d) of this subpart to use fuels that do not meet the fuel requirements of paragraphs (a) and (b) of §60.4207, may petition the Administrator for approval of

alternative emission standards, if they can demonstrate that they use a fuel that is not the fuel on which the manufacturer of the engine certified the engine and that the engine cannot meet the applicable standards required in §60.4202 or §60.4203 using such fuels.

(b) [Reserved]

General Provisions

§ 60.4218 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 apply to you.

Definitions

§ 60.4219 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Diesel particulate filter means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.

Emergency stationary internal combustion engine means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

Engine manufacturer means the manufacturer of the engine. See the definition of “manufacturer” in this section.

Fire pump engine means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

Manufacturer has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new

stationary engine into commerce in the United States. This includes importers who import stationary engines for sale or resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1039.801.

Model year means either:

(1) The calendar year in which the engine was originally produced, or

(2) The annual new model production period of the engine manufacturer if it is different than the calendar year. This must include January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year. For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was originally produced.

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Reciprocating internal combustion engine means any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to a gasoline, natural gas, or liquefied petroleum gas fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Subpart means 40 CFR part 60, subpart IIII.

Useful life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for useful life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for useful life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 94.9(a).

Table 1 to Subpart IIII of Part 60—Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of <10 Liters per Cylinder and 2007–2010 Model Year Engines >2,237 KW (3,000 HP) and With a Displacement of <10 Liters per Cylinder

[As stated in §§60.4201(b), 60.4202(b), 60.4204(a), and 60.4205(a), you must comply with the following emission standards]

Maximum engine power	Emission standards for stationary pre-2007 model year engines with a displacement of <10 liters per cylinder and 2007–2010 model year engines >2,237 KW (3,000 HP) and with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)				
	NMHC + NO_X	HC	NO_X	CO	PM
KW<8 (HP<11)	10.5 (7.8)			8.0 (6.0)	1.0 (0.75)
8≤KW<19 (11≤HP<25)	9.5 (7.1)			6.6 (4.9)	0.80 (0.60)
19≤KW<37 (25≤HP<50)	9.5 (7.1)			5.5 (4.1)	0.80 (0.60)
37≤KW<56 (50≤HP<75)			9.2 (6.9)		
56≤KW<75 (75≤HP<100)			9.2 (6.9)		
75≤KW<130 (100≤HP<175)			9.2 (6.9)		
130≤KW<225 (175≤HP<300)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
225≤KW<450 (300≤HP<600)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
450≤KW≤560 (600≤HP≤750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
KW>560 (HP>750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)

Table 2 to Subpart IIII of Part 60—Emission Standards for 2008 Model Year and Later Emergency Stationary CI ICE <37 KW (50 HP) With a Displacement of <10 Liters per Cylinder

[As stated in §60.4202(a)(1), you must comply with the following emission standards]

Engine power	Emission standards for 2008 model year and later emergency stationary CI ICE <37 KW (50 HP) with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)			
	Model year(s)	NO_X+ NMHC	CO	PM
KW<8 (HP<11)	2008+	7.5 (5.6)	8.0 (6.0)	0.40 (0.30)

Engine power	Emission standards for 2008 model year and later emergency stationary CI ICE <37 KW (50 HP) with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)			
	Model year(s)	NO_X+ NMHC	CO	PM
8≤KW<19 (11≤HP<25)	2008+	7.5 (5.6)	6.6 (4.9)	0.40 (0.30)
19≤KW<37 (25≤HP<50)	2008+	7.5 (5.6)	5.5 (4.1)	0.30 (0.22)

Table 3 to Subpart IIII of Part 60—Certification Requirements for Stationary Fire Pump Engines

[As stated in §60.4202(d), you must certify new stationary fire pump engines beginning with the following model years:]

Engine power	Starting model year engine manufacturers must certify new stationary fire pump engines according to §60.4202(d)
KW<75 (HP<100)	2011
75≤KW<130 (100≤HP<175)	2010
130≤KW≤560 (175≤HP≤750)	2009
KW>560 (HP>750)	2008

Table 4 to Subpart IIII of Part 60—Emission Standards for Stationary Fire Pump Engines

[As stated in §§60.4202(d) and 60.4205(c), you must comply with the following emission standards for stationary fire pump engines]

Maximum engine power	Model year(s)	NMHC + NO_X	CO	PM
KW<8 (HP<11)	2010 and earlier	10.5 (7.8)	8.0 (6.0)	1.0 (0.75)
	2011+	7.5 (5.6)		0.40 (0.30)
8≤KW<19 (11≤HP<25)	2010 and earlier	9.5 (7.1)	6.6 (4.9)	0.80 (0.60)
	2011+	7.5 (5.6)		0.40 (0.30)
19≤KW<37 (25≤HP<50)	2010 and earlier	9.5 (7.1)	5.5 (4.1)	0.80 (0.60)
	2011+	7.5 (5.6)		0.30 (0.22)
37≤KW<56 (50≤HP<75)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011+[1]	4.7 (3.5)		0.40 (0.30)
56≤KW<75 (75≤HP<100)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)

Maximum engine power	Model year(s)	NMHC + NO_X	CO	PM
	2011+[1]	4.7 (3.5)		0.40 (0.30)
75≤KW<130 (100≤HP<175)	2009 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2010+[2]	4.0 (3.0)		0.30 (0.22)
130≤KW<225 (175≤HP<300)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+[3]	4.0 (3.0)		0.20 (0.15)
225≤KW<450 (300≤HP<600)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+[3]	4.0 (3.0)		0.20 (0.15)
450≤KW≤560 (600≤HP≤750)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+	4.0 (3.0)		0.20 (0.15)
KW>560 (HP>750)	2007 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2008+	6.4 (4.8)		0.20 (0.15)

[1]For model years 2011–2013, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines.
[2]For model years 2010–2012, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.
[3]In model years 2009–2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.

Table 5 to Subpart IIII of Part 60—Labeling and Recordkeeping Requirements for New Stationary Emergency Engines

[You must comply with the labeling requirements in §60.4210(f) and the recordkeeping requirements in §60.4214(b) for new emergency stationary CI ICE beginning in the following model years:]

Engine power	Starting model year
19≤KW<56 (25≤HP<75)	2013
56≤KW<130 (75≤HP<175)	2012
KW≥130 (HP≥175)	2011

Table 6 to Subpart IIII of Part 60—Optional 3-Mode Test Cycle for Stationary Fire Pump Engines

[As stated in §60.4210(g), manufacturers of fire pump engines may use the following test cycle for testing fire pump engines:]

Mode No.	Engine speed[1]	Torque (percent)[2]	Weighting factors
1	Rated	100	0.30
2	Rated	75	0.50
3	Rated	50	0.20

1Engine speed: ±2 percent of point.
2Torque: NFPA certified nameplate HP for 100 percent point. All points should be ±2 percent of engine percent load value.

Table 7 to Subpart IIII of Part 60—Requirements for Performance Tests for Stationary CI ICE With a Displacement of ≥30 Liters per Cylinder

[As stated in §60.4213, you must comply with the following requirements for performance tests for stationary CI ICE with a displacement of ≥30 liters per cylinder:]

For each	Complying with the requirement to	You must	Using	According to the following requirements
1. Stationary CI internal combustion engine with a displacement of ≥30 liters per cylinder	a. Reduce NO_Xemissions by 90 percent or more	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O_2at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O_2concentration must be made at the same time as the measurements for NO_Xconcentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and,	(3) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see §60.17)	(c) Measurements to determine moisture content must be made at the same time as the measurements for NO_Xconcentration.

For each	Complying with the requirement to	You must	Using	According to the following requirements
		iv. Measure NO_Xat the inlet and outlet of the control device	(4) Method 7E of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see §60.17)	(d) NO_Xconcentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	b. Limit the concentration of NO_Xin the stationary CI internal combustion engine exhaust.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2concentration of the stationary internal combustion engine exhaust at the sampling port location; and,	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O_2concentration must be made at the same time as the measurement for NO_Xconcentration.
		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and,	(3) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see §60.17)	(c) Measurements to determine moisture content must be made at the same time as the measurement for NO_Xconcentration.
		iv. Measure NO_Xat the exhaust of the stationary internal combustion engine	(4) Method 7E of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see §60.17)	(d) NO_Xconcentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	c. Reduce PM emissions by 60 percent or more	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) Sampling sites must be located at the inlet and outlet of the control device.

For each	Complying with the requirement to	You must	Using	According to the following requirements
		ii. Measure O_2at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O_2concentration must be made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and	(3) Method 4 of 40 CFR part 60, appendix A	(c) Measurements to determine and moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the inlet and outlet of the control device	(4) Method 5 of 40 CFR part 60, appendix A	(d) PM concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	d. Limit the concentration of PM in the stationary CI internal combustion engine exhaust	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2concentration of the stationary internal combustion engine exhaust at the sampling port location; and	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O_2concentration must be made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(3) Method 4 of 40 CFR part 60, appendix A	(c) Measurements to determine moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the exhaust of the stationary internal combustion engine	(4) Method 5 of 40 CFR part 60, appendix A	(d) PM concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

Table 8 to Subpart IIII of Part 60—Applicability of General Provisions to Subpart IIII

[As stated in §60.4218, you must comply with the following applicable General Provisions:]

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§60.1	General applicability of the General Provisions	Yes	
§60.2	Definitions	Yes	Additional terms defined in §60.4219.
§60.3	Units and abbreviations	Yes	
§60.4	Address	Yes	
§60.5	Determination of construction or modification	Yes	
§60.6	Review of plans	Yes	
§60.7	Notification and Recordkeeping	Yes	Except that §60.7 only applies as specified in §60.4214(a).
§60.8	Performance tests	Yes	Except that §60.8 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder and engines that are not certified.
§60.9	Availability of information	Yes	
§60.10	State Authority	Yes	
§60.11	Compliance with standards and maintenance requirements	No	Requirements are specified in subpart IIII.
§60.12	Circumvention	Yes	
§60.13	Monitoring requirements	Yes	Except that §60.13 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder.
§60.14	Modification	Yes	
§60.15	Reconstruction	Yes	
§60.16	Priority list	Yes	
§60.17	Incorporations by reference	Yes	
§60.18	General control device requirements	No	
§60.19	General notification and reporting requirements	Yes	

Indiana Department of Environmental Management
Office of Air Quality

Attachment E

Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Source: 69 FR 33506, June 15, 2004, unless otherwise noted.

What This Subpart Covers

§ 63.6580 What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

[73 FR 3603, Jan. 18, 2008]

§ 63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

(c) An area source of HAP emissions is a source that is not a major source.

(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008]

§ 63.6590 What parts of my plant does this subpart cover?

This subpart applies to each affected source.

(a) *Affected source.* An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(1) *Existing stationary RICE.*

(i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

(ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) *New stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(3) *Reconstructed stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(b) *Stationary RICE subject to limited requirements.* (1) An affected source which meets either of the criteria in paragraph (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(h).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions; or

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of §63.6645(h) and the requirements of §§63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

(3) A stationary RICE which is an existing spark ignition 4 stroke rich burn (4SRB) stationary RICE located at an area source, an existing spark ignition 4SRB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source, an existing spark ignition 2 stroke lean burn (2SLB) stationary RICE, an existing spark ignition 4 stroke lean burn (4SLB) stationary RICE, an existing compression ignition (CI) stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, does not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary.

(c) *Stationary RICE subject to Regulations under 40 CFR Part 60.* An affected source that is a new or reconstructed stationary RICE located at an area source, or is a new or reconstructed stationary RICE located at a major source of HAP emissions and is a spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of less than 500 brake HP, a spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of less than 250 brake HP, or a 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP, a stationary RICE with a site rating of less than or equal to 500 brake HP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP, or a compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP, must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008]

§ 63.6595 When do I have to comply with this subpart?

(a) *Affected Sources.* (1) If you have an existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than June 15, 2007.

(2) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.

(3) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(4) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(5) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the

applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(6) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(7) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(b) *Area sources that become major sources.* If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.

(1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.

(2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with the provisions of this subpart that are applicable to RICE located at major sources within 3 years after your area source becomes a major source of HAP.

(c) If you own or operate an affected source, you must meet the applicable notification requirements in §63.6645 and in 40 CFR part 63, subpart A.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008]

Emission and Operating Limitations

§ 63.6600 What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

(a) If you own or operate an existing, new, or reconstructed spark ignition 4SRB stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a to this subpart and the operating limitations in Table 1b to this subpart which apply to you.

(b) If you own or operate a new or reconstructed 2SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, a new or reconstructed 4SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, or a new or reconstructed CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

(c) If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the emission limitations in Tables 1a and 2a to this subpart or operating limitations in Tables 1b and 2b to this subpart: an existing 2SLB stationary RICE, an existing 4SLB stationary RICE, or an existing CI stationary RICE; a stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE.

[73 FR 3605, Jan. 18, 2008]

§ 63.6601 What emission limitations must I meet if I own or operate a 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than 500 brake HP located at a major source of HAP emissions?

If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at major source of HAP emissions manufactured on or after January 1, 2008, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008]

General Compliance Requirements

§ 63.6605 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times, except during periods of startup, shutdown, and malfunction.

(b) If you must comply with emission limitations and operating limitations, you must operate and maintain your stationary RICE, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during startup, shutdown, and malfunction.

Testing and Initial Compliance Requirements

§ 63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

If you own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(c) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by December 13, 2007 or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (d)(1) through (5) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

(5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3605, Jan. 18, 2008]

§ 63.6611 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?

If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must conduct an initial performance test within 240 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions specified in Table 4 to this subpart, as appropriate.

[73 FR 3605, Jan. 18, 2008]

§ 63.6615 When must I conduct subsequent performance tests?

If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.

§ 63.6620 What performance tests and other procedures must I use?

(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements in §63.7(e)(1) and under the specific conditions that this subpart specifies in Table 4. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

(c) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).

(d) You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour.

(e)(1) You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad \text{(Eq. 1)}$$

Where:

C_i= concentration of CO or formaldehyde at the control device inlet,

C_o= concentration of CO or formaldehyde at the control device outlet, and

R = percent reduction of CO or formaldehyde emissions.

(2) You must normalize the carbon monoxide (CO) or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO_2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO_2concentration is measured in lieu of oxygen concentration measurement, a CO_2correction factor is needed. Calculate the CO_2correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

(i) Calculate the fuel-specific $F_o$value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

$$F_o = \frac{0.209\, F_d}{F_c} \qquad \text{(Eq. 2)}$$

Where:

F_o= Fuel factor based on the ratio of oxygen volume to the ultimate CO_2volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

F_d= Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3 /J (dscf/10^6 Btu).

F_c= Ratio of the volume of CO_2produced to the gross calorific value of the fuel from Method 19, dsm^3 /J (dscf/10^6 Btu).

(ii) Calculate the CO_2correction factor for correcting measurement data to 15 percent oxygen, as follows:

$$X_{co_2} = \frac{5.9}{F_o} \qquad \text{(Eq. 3)}$$

Where:

X_{co2}= CO_2correction factor, percent.

5.9 = 20.9 percent O_2−15 percent O_2, the defined O_2correction value, percent.

(iii) Calculate the $NO_X$and SO_2gas concentrations adjusted to 15 percent O_2using CO_2as follows:

$$C_{adj} = C_d \frac{X_{co_2}}{\%CO_2} \qquad \text{(Eq. 4)}$$

Where:

$\%CO_2$= Measured CO_2concentration measured, dry basis, percent.

(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.

(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.

(1) Identification of the specific parameters you propose to use as operating limitations;

(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (*e.g.,* operator adjustment, automatic controller adjustment, etc.) or unintentionally (*e.g.,* wear and tear, error, etc.) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;

(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;

(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;

(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and

(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

§ 63.6625 What are my monitoring, installation, operation, and maintenance requirements?

(a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either oxygen or CO_2at both the inlet and the outlet of the control device according to the requirements in paragraphs (a)(1) through (4) of this section.

(1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.

(2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in §63.8 and according to the applicable performance specifications of 40 CFR part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

(3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.

(4) The CEMS data must be reduced as specified in §63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO_2concentration.

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in §63.8.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

(d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter prior to the startup of the engine.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3606, Jan. 18, 2008]

§ 63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations?

(a) You must demonstrate initial compliance with each emission and operating limitation that applies to you according to Table 5 of this subpart.

(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.

Continuous Compliance Requirements

§ 63.6635 How do I monitor and collect data to demonstrate continuous compliance?

(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously at all times that the stationary RICE is operating.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

§ 63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?

(a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b and Tables 2a and 2b of this subpart that apply to you according to methods specified in Table 6 of this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b and Tables 2a and 2b of this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(c) [Reserved]

(d) Consistent with §§63.6(e) and 63.7(e)(1), deviations from the emission or operating limitations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the

Administrator's satisfaction that you were operating in accordance with §63.6(e)(1). For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations.

Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR §94.11(a).

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate any stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing CI stationary RICE, an existing emergency stationary RICE, an existing limited use emergency stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008]

Notifications, Reports, and Records

§ 63.6645 What notifications must I submit and when?

(a) If you own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions or a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions, you must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified.

(b) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.

(c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(d) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an Initial Notification not later than July 16, 2008.

(e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008 and you are required to submit an initial notification, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

(g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).

(h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

[73 FR 3606, Jan. 18, 2008]

§ 63.6650 What reports must I submit and when?

(a) You must submit each report in Table 7 of this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (5) of this section.

(1) The first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595.

(2) The first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.

(3) Each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

(1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.

(2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.

(3) Any problems or errors suspected with the meters.

§ 63.6655 What records must I keep?

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(3), (b)(1) through (b)(3) and (c) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Previous (*i.e.,* superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

§ 63.6660 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records off-site for the remaining 3 years.

Other Requirements and Information

§ 63.6665 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. If you own or operate any stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions: An existing 2SLB RICE, an existing 4SLB stationary RICE, an existing CI stationary RICE, an existing stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

[73 FR 3606, Jan. 18, 2008]

§ 63.6670 Who implements and enforces this subpart?

(a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out whether this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are:

(1) Approval of alternatives to the non-opacity emission limitations and operating limitations in §63.6600 under §63.6(g).

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

(5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in §63.6610(b).

§ 63.6675 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA); in 40 CFR 63.2, the General Provisions of this part; and in this section as follows:

Area source means any stationary source of HAP that is not a major source as defined in part 63.

Associated equipment as used in this subpart and as referred to in section 112(n)(4) of the CAA, means equipment associated with an oil or natural gas exploration or production well, and includes all equipment from the well bore to the point of custody transfer, except glycol dehydration units, storage vessels with potential for flash emissions, combustion turbines, and stationary RICE.

CAA means the Clean Air Act (42 U.S.C. 7401 *et seq.,* as amended by Public Law 101–549, 104 Stat. 2399).

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Custody transfer means the transfer of hydrocarbon liquids or natural gas: After processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation. For the purposes of this subpart, the point at which such liquids or natural gas enters a natural gas processing plant is a point of custody transfer.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless or whether or not such failure is permitted by this subpart.

(4) Fails to satisfy the general duty to minimize emissions established by §63.6(e)(1)(i).

Diesel engine means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. This process is also known as compression ignition.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is fuel oil number 2.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO_2.

Dual-fuel engine means any stationary RICE in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel.

Emergency stationary RICE means any stationary RICE whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc. Stationary RICE used for peak shaving are not considered emergency stationary RICE. Stationary ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines. Emergency stationary RICE with a site-rating of more than 500 brake HP located at a major source of HAP emissions that were installed prior to June 12, 2006, may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance. Emergency stationary RICE with a site-rating of more than 500 brake HP located at a major source of HAP emissions that were installed prior to June 12, 2006, may also operate an additional 50 hours per year in non-emergency situations. Emergency stationary RICE with a site-rating of more than 500 brake HP located at a major source of HAP emissions that were installed on or after June 12, 2006, must comply with requirements specified in 40 CFR 60.4243(d).

Four-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

Gaseous fuel means a material used for combustion which is in the gaseous state at standard atmospheric temperature and pressure conditions.

Gasoline means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

Glycol dehydration unit means a device in which a liquid glycol (including, but not limited to, ethylene glycol, diethylene glycol, or triethylene glycol) absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber). The glycol contacts and absorbs water vapor and other gas stream constituents from the natural gas and becomes “rich” glycol. This glycol is then regenerated in the glycol dehydration unit reboiler. The “lean” glycol is then recycled.

Hazardous air pollutants (HAP) means any air pollutants listed in or pursuant to section 112(b) of the CAA.

ISO standard day conditions means 288 degrees Kelvin (15 degrees Celsius), 60 percent relative humidity and 101.3 kilopascals pressure.

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO_2.

Lean burn engine means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

Limited use stationary RICE means any stationary RICE that operates less than 100 hours per year.

Liquefied petroleum gas means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining of natural gas production.

Liquid fuel means any fuel in liquid form at standard temperature and pressure, including but not limited to diesel, residual/crude oil, kerosene/naphtha (jet fuel), and gasoline.

Major Source, as used in this subpart, shall have the same meaning as in §63.2, except that:

(1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;

(2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated;

(3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and

(4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

Non-selective catalytic reduction (NSCR) means an add-on catalytic nitrogen oxides (NO_X) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO_X, CO, and volatile organic compounds (VOC) into CO_2, nitrogen, and water.

Oil and gas production facility as used in this subpart means any grouping of equipment where hydrocarbon liquids are processed, upgraded (*i.e.,* remove impurities or other constituents to meet contract specifications), or stored prior to the point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage source category. For purposes of a major source determination, facility (including a building, structure, or installation) means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in this section. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Pieces of production equipment or groupings of equipment located on different oil and gas leases, mineral fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, or separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

Oxidation catalyst means an add-on catalytic control device that controls CO and VOC by oxidation.

Peaking unit or engine means any standby engine intended for use during periods of high demand that are not emergencies.

Percent load means the fractional power of an engine compared to its maximum manufacturer's design capacity at engine site conditions. Percent load may range between 0 percent to above 100 percent.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities subject to subpart HH of this part, the potential to emit provisions in §63.760(a) may be used. For natural gas transmission and storage facilities subject to subpart HHH of this part, the maximum annual facility gas throughput for storage facilities may be determined according to §63.1270(a)(1) and the maximum annual throughput for transmission facilities may be determined according to §63.1270(a)(2).

Production field facility means those oil and gas production facilities located prior to the point of custody transfer.

Production well means any hole drilled in the earth from which crude oil, condensate, or field natural gas is extracted.

Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C_3H_8.

Responsible official means responsible official as defined in 40 CFR 70.2.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to December 19, 2002 with passive emission control technology for NO_X(such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

Site-rated HP means the maximum manufacturer's design capacity at engine site conditions.

Spark ignition means relating to either: A gasoline-fueled engine; or any other type of engine a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

Stationary RICE test cell/stand means an engine test cell/stand, as defined in subpart PPPPP of this part, that tests stationary RICE.

Stoichiometric means the theoretical air-to-fuel ratio required for complete combustion.

Storage vessel with the potential for flash emissions means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

Subpart means 40 CFR part 63, subpart ZZZZ.

Surface site means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3607, Jan. 18, 2008]

Table 1a to Subpart ZZZZ of Part 63—Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

[As stated in §63.6600, you must comply with the following emission limitations for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions at 100 percent load plus or minus 10 percent]

For each...	You must meet the following emission limitations...
1. 4SRB stationary RICE	a. reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007;
	or
	b. limit the concentration of formaldehyde in the stationary RICE exhaust 350 ppbvd or less at 15 percent O_2.

[73 FR 3607, Jan. 18, 2008]

Table 1b to Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

[As stated in §§63.6600, 63.6630 and 63.6640, you must comply with the following operating emission limitations for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions]

For each...	You must meet the following operating limitation...
1. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and
4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent $O_2$and using NSCR.	b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750 °F and less than or equal to 1250 °F.
2. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR; or	Comply with any operating limitations approved by the Administrator.
4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent $O_2$and not using NSCR.	

[73 FR 3607, Jan. 18, 2008]

Table 2a to Subpart ZZZZ of Part 63—Emission Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP and 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions

[As stated in §§63.6600 and 63.6601, you must comply with the following emission limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE at 100 percent load plus or minus 10 percent]

For each...	You must meet the following emission limitation...
1. 2SLB stationary RICE	a. reduce CO emissions by 58 percent or more;
	or
	b. limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O_2. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O_2until June 15, 2007.
2. 4SLB stationary RICE	a. reduce CO emissions by 93 percent or more;
	or
	b. limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O_2.
3. CI stationary RICE	a. reduce CO emissions by 70 percent or more;
	or
	b. limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O_2.

[73 FR 3608, Jan. 18, 2008]

Table 2b to Subpart ZZZZ of Part 63—Operating Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP and 4SLB Burn Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions

[As stated in §§63.6600, 63.6601, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary]

For each...	You must meet the following operating limitation...
1. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.
2. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst	Comply with any operating limitations approved by the Administrator.

[73 FR 3608, Jan. 18, 2008]

Table 3 to Subpart ZZZZ of Part 63—Subsequent Performance Tests

[As stated in §§63.6615 and 63.6620, you must comply with the following subsequent performance test requirements]

For each . . .	Complying with the requirement to . . .	You must . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semiannually.[1]
2. 4SRB stationary RICE with a brake horsepower ≥5,000	Reduce formaldehyde emissions	Conduct subsequent performance tests semiannually.[1]
3. Stationary RICE (all stationary RICE subcategories and all brake horsepower ratings)	Limit the concentration of formaldehyde in the stationary RICE exhaust	Conduct subsequent performance tests semiannually.[1]

[1]After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests

[As stated in §§63.6610, 63.6611, 63.6620, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE]

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
1. 2SLB, 4SLB, and CI stationary RICE	a. Reduce CO emissions	i. Measure the O_2at the inlet and outlet of the control device; and	(1) Portable CO and O_2analyzer	(a) Using ASTM D6522–00 (2005)[a](incorporated by reference, see §63.14). Measurements to determine O2 must be made at the same time as the measurements for CO concentration.
		ii. Measure the CO at the inlet and the outlet of the control device	(1) Portable CO and O_2analyzer	(a) Using ASTM D6522–00 (2005)[a](incorporated by reference, see §63.14) or Method 10 of 40 CFR, appendix A. The CO concentration must be at 15 percent O2, dry basis.
2. 4SRB stationary RICE	a. Reduce formaldehyde emissions	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i)	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O2 at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522–00 (2005).	(a) Measurements to determine O2 concentration must be made at the same time as the measurements for formaldehyde concentration.
		iii. Measure moisture content at the inlet and outlet of the control device; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
		iv. Measure formaldehyde at the inlet and the outlet of the control device	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348–03[b], provided in ASTM D6348–03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
3. Stationary RICE	a. Limit the concentration of formaldehyde in the stationary RICE exhaust	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i)	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O2 concentration of the stationary RICE exhaust at the sampling port location; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522–00 (2005)	(a) Measurements to determine O2 concentration must be made at the same time and location as the measurements for formaldehyde concentration.
		iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. Measure formaldehyde at the exhaust of the stationary RICE	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348–03[b], provided in ASTM D6348–03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

[a]You may also use Methods 3A and 10 as options to ASTM–D6522–00 (2005). You may obtain a copy of ASTM–D6522–00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

[b]You may obtain a copy of ASTM–D6348–03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

[73 FR 3609, Jan. 18, 2008]

Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations and Operating Limitations

[As stated in §§63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following]

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS	i. the average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
2. 2SLB and 4SLB stationary RICE and CI stationary RICE	a. Reduce CO emissions and not using oxidation catalyst	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
3. 2SLB and 4SLB stationary RICE and CI stationary RICE	a. Reduce CO emissions, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O_2or CO_2at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and
		ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and
		iii. The average reduction of CO calculated using §63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
4. 4SRB stationary RICE	a. Reduce formaldehyde emissions and using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
5. 4SRB stationary RICE	a. Reduce formaldehyde emissions and not using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
6. Stationary RICE	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
7. Stationary RICE	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.

Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations and Operating Limitations

[As stated in §63.6640, you must continuously comply with the emissions and operating limitations as required by the following]

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE	a. Reduce CO emissions and using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved[1]; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
2. 2SLB and 4SLB stationary RICE and CI stationary RICE	a. Reduce CO emissions and not using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved[1]; and
		ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
3. 2SLB and 4SLB stationary RICE and CI stationary RICE	a. Reduce CO emissions and using a CEMS	i. Collecting the monitoring data according to §63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction of CO emissions according to §63.6620; and
		ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period; and

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
		iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.
4. 4SRB stationary RICE	a. Reduce formaldehyde emissions and using NSCR	i. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
5. 4SRB stationary RICE	a. Reduce formaldehyde emissions and not using NSCR	i. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		ii. reducing these data to 4-hour rolling averages;
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
6. 4SRB stationary RICE with a brake horsepower ≥5,000	Reduce formaldehyde emissions	Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved[1].
7. Stationary RICE	Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit[1]; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
8. Stationary RICE	Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit[1]; and
		ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.

[1]After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

[As stated in §63.6650, you must comply with the following requirements for reports]

You must submit a(n)	The report must contain . . .	You must submit the report . . .
1. Compliance report	a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or	i. Semiannually according to the requirements in §63.6650(b).

You must submit a(n)	The report must contain . . .	You must submit the report . . .
	b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or	i. Semiannually according to the requirements in §63.6650(b).
	c. If you had a startup, shutdown or malfunction during the reporting period, the information in §63.10(d)(5)(i)	i. Semiannually according to the requirements in §63.6650(b).
2. An immediate startup, shutdown, and malfunction report if actions addressing the startup, shutdown, or malfunction were inconsistent with your startup, shutdown, or malfunction plan during the reporting period	a. Actions taken for the event; and	i. By fax or telephone within 2 working days after starting actions inconsistent with the plan.
	b. The information in §63.10(d)(5)(ii).	i. By letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authorities. (§63.10(d)(5)(ii))
3. Report	a. The fuel flow rate of each fuel and the heating values that were used in your calculations, and you must demonstrate that the percentage of heat input provided by landfill gas or digester gas, is equivalent to 10 percent or more of the gross heat input on an annual basis; and	i. Annually, according to the requirements in §63.6650.
	b. The operating limits provided in your federally enforceable permit, and any deviations from these limits; and	i. See item 3.a.i.
	c. Any problems or errors suspected with the meters	i. See item 3.a.i.

Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ

[As stated in §63.6665, you must comply with the following applicable general provisions]

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.2	Definitions	Yes	Additional terms defined in §63.6675.
§63.3	Units and abbreviations	Yes	
§63.4	Prohibited activities and circumvention	Yes	
§63.5	Construction and reconstruction	Yes	
§63.6(a)	Applicability	Yes	
§63.6(b)(1)–(4)	Compliance dates for new and reconstructed sources	Yes	
§63.6(b)(5)	Notification	Yes	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes	
§63.6(c)(1)–(2)	Compliance dates for existing sources	Yes	
§63.6(c)(3)–(4)	[Reserved]		
§36.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes	
§63.6(d)	[Reserved]		
§63.6(e)(1)	Operation and maintenance	Yes	
§63.6(e)(2)	[Reserved]		
§63.6(e)(3)	Startup, shutdown, and malfunction plan	Yes	
§63.6(f)(1)	Applicability of standards except during startup shutdown malfunction (SSM)	Yes	
§63.6(f)(2)	Methods for determining compliance	Yes	
§63.6(f)(3)	Finding of compliance	Yes	
§63.6(g)(1)–(3)	Use of alternate standard	Yes	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.6(i)	Compliance extension procedures and criteria	Yes	
§63.6(j)	Presidential compliance exemption	Yes	
§63.7(a)(1)–(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §§63.6610 and 63.6611.
§63.7(a)(3)	CAA section 114 authority	Yes	
§63.7(b)(1)	Notification of performance test	Yes	
§63.7(b)(2)	Notification of rescheduling	Yes	
§63.7(c)	Quality assurance/test plan	Yes	
§63.7(d)	Testing facilities	Yes	
§63.7(e)(1)	Conditions for conducting performance tests	Yes	
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at §63.6620.
§63.7(e)(3)	Test run duration	Yes	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes	
§63.7(f)	Alternative test method provisions	Yes	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes	
§63.7(h)	Waiver of tests	Yes	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at §63.6625.
§63.8(a)(2)	Performance specifications	Yes	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No	
§63.8(b)(1)	Monitoring	Yes	
§63.8(b)(2)–(3)	Multiple effluents and multiple monitoring systems	Yes	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.8(c)(1)	Monitoring system operation and maintenance	Yes	
§63.8(c)(1)(i)	Routine and predictable SSM	Yes	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	Yes	
§63.8(c)(2)–(3)	Monitoring system installation	Yes	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§63.8(c)(6)–(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes	
§63.8(e)	CMS performance evaluation	Yes	Except for §63.8(e)(5)(ii), which applies to COMS.
§63.8(f)(1)–(5)	Alternative monitoring method	Yes	
§63.8(f)(6)	Alternative to relative accuracy test	Yes	
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes	
§63.9(b)(1)–(5)	Initial notifications	Yes	Except that §63.9(b)(3) is reserved.
§63.9(c)	Request for compliance extension	Yes	
§63.9(d)	Notification of special compliance requirements for new sources	Yes	
§63.9(e)	Notification of performance test	Yes	
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
§63.9(h)(1)–(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. §63.9(h)(4) is reserved.
§63.9(i)	Adjustment of submittal deadlines	Yes	
§63.9(j)	Change in previous information	Yes	
§63.10(a)	Administrative provisions for record keeping/reporting	Yes	
§63.10(b)(1)	Record retention	Yes	
§63.10(b)(2)(i)–(v)	Records related to SSM	Yes	
§63.10(b)(2)(vi)–(xi)	Records	Yes	
§63.10(b)(2)(xii)	Record when under waiver	Yes	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes	
§63.10(b)(3)	Records of applicability determination	Yes	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that §63.10(c)(2)–(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes	
§63.10(d)(2)	Report of performance test results	Yes	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	Yes	
§63.10(e)(1) and (2)(i)	Additional CMS reports	Yes	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes	Except that §63.10(e)(3)(i)(C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes	
§63.11	Flares	No	
§63.12	State authority and delegations	Yes	
§63.13	Addresses	Yes	
§63.14	Incorporation by reference	Yes	
§63.15	Availability of information	Yes	

[73 FR 3610, Jan. 18, 2008]

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document for a Part 70
Significant Source Modification and
Significant Permit Modification

Source Name:	U.S. Steel - Gary Works
Source Address:	1 North Broadway, Gary, Indiana 46402
County:	Lake
SIC Code:	3312
Operation Permit No.:	T089-7663-00121
Operation Permit Issuance Date:	August 18, 2006
Significant Source Modification No.:	089-28848-00121
Significant Permit Modification No.:	089-29236-00121
Permit Reviewer:	Jenny Acker

Public Notice Information

On June 7, 2010, the Office of Air Quality (OAQ) had a notice published in The Times, Munster, Indiana, stating that U.S. Steel – Gary Works (U.S. Steel) had applied for a significant modification to its Part 70 Operating Permit. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that the period to provide comments on whether or not this permit should be issued as proposed would end on July 16, 2010.

IDEM, OAQ also received a significant number of comments from citizens. These comments are all addressed in this document. The substantive portions of comments received are paraphrased. Not all of the comments received are cited in entirety in this document, but all comments received during the public comment period are available for review as part of the public file.

IDEM, OAQ Changes

Upon further review, the IDEM, OAQ has made the following revisions to the permit. The summary of the comments and revisions to the permit (**bolded** language has been added, the ~~strikethrough~~ language has been deleted) is as follows:

IDEM, OAQ Change No. 1:

To ensure that each baghouse listed in Section D.19 is operating within the parameters utilized in the calculations, a recordkeeping requirement has been added to the permit.

Condition D.19.9 – Record Keeping Requirements has been revised as follows:

D.19.9 Record Keeping Requirements

(a) To demonstrate the compliance status with Condition D.19.1, for each baghouse listed in this section, the Permittee shall maintain records of the manufacturer's specifications. Records shall be complete and sufficient to demonstrate the compliance status with the PM, PM10, and PM2.5 emission limits established in Condition D.19.1.

Subsequent paragraphs have been renumbered.

IDEM, OAQ Change No. 2:

The baseline emissions from the pulverizer building, the railcar side, and bottom thawing are not part of the CASP project as these facilities are associated with the pulverized coal processes. Therefore, increased utilization from the railcar heater system associated with the thaw shed has been evaluated instead. The baseline, future allowable, and summary worksheets of the calculations have been updated. See Appendix A of this Addendum to the Technical Support Document for detailed emission calculations.

Comments from U.S. EPA, Region V

On July 16, 2010, Mr. Sam Portanova, on behalf of the U.S. EPA, Region V (EPA), submitted comments on the proposed significant modification to the Part 70 permit. The summary of the comments and revisions to the permit (**bolded** language has been added, the ~~strikethrough~~ language has been deleted) is as follows:

Comment 1:

Several permit conditions (D.1.9, D.2.9(d-f), D.18.1(d-f), and D.19.1(b-c)) establish synthetic minor limits for the carbon alloy synthesis plants (CASP) modifications. The limits are in tons per year (vs. rolled monthly) and reflect the PSD/NSR significance threshold (not the CASP emissions before netting). These limits on their own are not practically enforceable because they are an annual limit. Also, the “significance threshold” limit seems to be inaccurate since the CASP project before netting has emissions above the threshold.

Comment 2:

EPA has an open compliance investigation regarding the excess visible emissions from coke oven batteries at this source. Because EPA has concerns with emissions from units that are part of this project's netting analysis, the permit shield generally provided for this Title V permit modification does not attach to any conditions under the scope of the enforcement action established in this minor NSR permit and concurrently with the Title V permit. Following resolution of this issue, IDEM must reopen this permit, if necessary, to revise the existing limitations or netting analysis and incorporate into the Title V permit a compliance schedule or new applicable requirements.

IDEM, OAQ Response:

IDEM, OAQ has agreed to revise these conditions to clarify that the net emissions for the CASP project will remain below the significance threshold. IDEM, OAQ agrees with Comment 1. The synthetic minor limits (Conditions D.1.9, D.2.9(d-f), D.18.1(d-f), D.19.1(b-c), and D.20.1(f-g)) have been revised and now reflect that the emissions increases are “net” and are in terms of twelve (12) consecutive months rather than annual.

In response to Comment 2, IDEM, OAQ has added Conditions D.18.1.1, D.19.1.1, and D.20.1.1, which contain provisions reflecting the investigation and the applicability of Condition B.12 – Permit Shield to Conditions D.18, D.19, and D.20.

Additionally, IDEM, OAQ has made the following revisions:

(a) On June 2, 2010, the Air Pollution Control Board voted an emergency rule to move Lake and Porter Counties to attainment for the 8-hour ozone standard. This rule was affective June 4, 2010. The U.S. EPA has acknowledged in both the proposed and final rulemaking for this redesignation that the anti-backsliding provisions for the 1-hour ozone standard no longer apply as a result of the redesignation under the 8-hour standard. Therefore, permits issued in Lake and Porter Counties are no longer subject to the review pursuant to Emission Offset, 326 IAC 2-3. The source status in Condition A.1 has been revised to reflect this change. Condition A.1 – General Information has been revised to reflect the change in Ozone attainment status and that the source is no longer major under Emission Offset (326 IAC 2-3).

(b) Conditions D.1.9, D.2.9 and D.18.1 (Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10/NOx/SO2/CO [326 IAC 2-2] Emission Offset Minor Limit VOC [326 IAC 2-3] Nonattainment New Source Review (NSR) Minor Limit PM2.5 [326 IAC 2-1.1-5]), have been revised, since VOC and NOx emissions are no longer subject to review under the provisions of Emission Offset (326 IAC 2-3). The VOC and NOx emission have been reviewed under the provisions of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and the VOC and NOx limitations are now cited under the rules of 326 IAC 2-2 (PSD).

(c) Conditions D.1.9(a), D.1.9(b) (formerly D.1.9(c)), D.2.9(a), D.2.9(b) (formerly D.2.9(c)), D.18.1(d), D.18.1(e) (formerly D.18.1(f)), D.19.1(b), D.19.1(c), D.20.1(f), and D.20.1(g) have been modified to clarify that the limits are necessary for the CASP project.

New Conditions D.18.1.1, D.19.1.1, and D.20.1.1 have been added and Conditions A.1, D.1.9, D.2.9, D.18.1, D.19.1, and D.20.1 have been revised as follows:

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates an integrated steel mill.

Source Address:	1 North Broadway, Gary, Indiana 46402
Mailing Address:	1 North Broadway, Gary, Indiana 46402
General Source Phone Number:	219-888-3387
SIC Code:	3312
County Location:	Lake
Source Location Status:	~~Nonattainment for 8-hour ozone~~ Nonattainment for $PM_{2.5}$ Attainment or unclassifiable for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD~~,~~ **and** nonattainment ~~for~~ NSR ~~and Emission Offset Rules~~; Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

D.1.9 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10/NOx/SO2/CO**/VOC** [326 IAC 2-2] ~~Emission Offset Minor Limit VOC [326 IAC 2-3]~~ Nonattainment New Source Review (NSR) Minor Limit PM2.5/SO2 [326 IAC 2-1.1-5]

* * *

Compliance with this requirement, in conjunction with other limits taken as part of the CASP modifications (SSM 089-22848-00121 and SPM 089-29236-00121), will ensure the following:

(a) The PM, PM10, NOx, SO2, **VOC,** and CO **net** emissions increase from the CASP modifications **(SSM 089-22848-00121 and SPM 089-29236-00121)** shall be less than twenty-five (25), fifteen (15), forty (40), forty (40), **forty (40),** and one hundred (100) tons per ~~year~~ **twelve (12) consecutive month period**, respectively**, with compliance**

determined at the end of each month. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable to these modifications.

~~(b) The VOC and NOx emissions increase from the CASP modifications shall be less than twenty-five (25) and forty (40) tons per year, respectively. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) are rendered not applicable to these modifications.~~

~~(c)~~**(b)** The PM2.5 and SO2 **net** emissions increase from the CASP modifications (**SSM 089-22848-00121 and SPM 089-29236-00121)** shall be less than ten (10) and forty (40) tons, respectively**,** per ~~year~~ **twelve (12) consecutive month period**, **with compliance determined at the end of each month**. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) are rendered not applicable to these modifications.

D.2.9 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10/NOx/SO2/CO**/VOC** [326 IAC 2-2] ~~Emission Offset Minor Limit VOC [326 IAC 2-3]~~
Nonattainment New Source Review (NSR) Minor Limit PM2.5/SO2 [326 IAC 2-1.1-5]

* * *

Compliance with this requirement, in conjunction with other limits taken as part of the CASP modifications (SSM 089-22848-00121 and SPM 089-29236-00121), will ensure the following:

(d) The PM, PM10, NOx, SO2, **VOC,** and CO **net** emissions increase from the CASP modifications **(SSM 089-22848-00121 and SPM 089-29236-00121)** shall be less than twenty-five (25), fifteen (15), forty (40), forty (40), **forty (40),** and one hundred (100) tons, respectively, per ~~year~~ **twelve (12) consecutive month period**, **with compliance determined at the end of each month**. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable to these modifications.

~~(e) The VOC and NOx **net** emissions increase from the CASP modifications **(SSM 089-22848-00121 and SPM 089-29236-00121)** shall be less than twenty-five (25) and forty (40) tons per year, respectively. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) are rendered not applicable to these modifications.~~

~~(f)~~**(e)** The PM2.5 and SO2 **net** emissions increase from the CASP modifications **(SSM 089-22848-00121 and SPM 089-29236-00121)** shall be less than ten (10) and forty (40) tons, respectively, per ~~year~~ **twelve (12) consecutive month period**, **with compliance determined at the end of each month**. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) are rendered not applicable to these modifications.

D.18.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10/NOx/SO2/CO**/VOC** [326 IAC 2-2] ~~Emission Offset Minor Limit VOC/NOx [326 IAC 2-3]~~
Nonattainment New Source Review (NSR) Minor Limit PM2.5/SO2 [326 IAC 2-1.1-5]

* * *

Compliance with these limits, in conjunction with other limits taken as part of the CASP modification (SSM 089-22848-00121 and SPM 089-29236-00121), will ensure the following:

(d) The PM, PM10, NOx, SO2, **VOC,** and CO **net** emissions increase from the CASP modifications **(SSM 089-22848-00121 and SPM 089-29236-00121)** shall be less than twenty-five (25), fifteen (15), forty (40), forty (40), **forty (40)** and one hundred (100) tons, respectively, per ~~year~~ **twelve (12) consecutive month period**, **with compliance determined at the end of each month**. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable to these modifications.

~~(e) The VOC and NOx **net** emissions increase from the CASP modifications (**SSM 089-22848-00121 and SPM 089-29236-00121)** shall be less than twenty-five (25) and forty (40) tons per year, respectively. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) are rendered not applicable to these modifications.~~

~~(f)~~**(e)** The PM2.5 and SO2 **net** emissions increase from the CASP modifications **(SSM 089-22848-00121 and SPM 089-29236-00121)** shall be less than ten (10) and forty (40) tons, respectively, per ~~year~~ **twelve (12) consecutive month period**, **with compliance determined at the end of each month**. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) are rendered not applicable to these modifications.

D.18.1.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10 [326 IAC 2-2]
Nonattainment New Source Review (NSR) Minor Limit PM2.5/SO2 [326 IAC 2-1.1-5]

On June 27, 2008, the U.S. EPA issued Notices of Violation (NOV) to the Permittee for alleged violations regarding excess emissions from the coke oven batteries. Therefore the Permit Shield in Section B - Permit Shield does not shield the Permittee from possible enforcement actions initiated by U.S. EPA, IDEM or citizens. Compliance with the terms of this permit does not serve as proof of compliance for the emission units or the matters addressed in the NOVs. Following resolution of this enforcement action, IDEM will reopen this permit, if necessary, to incorporate a compliance schedule or any new applicable requirements. The standard language of Section B - Permit Shield does not shield any activity on which the permit is silent.

D.19.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10 [326 IAC 2-2]
Nonattainment New Source Review (NSR) Minor Limit PM2.5 [326 IAC 2-1.1-5]

* * *

Compliance with these limits, in conjunction with other limits taken as part of the CASP modification (SSM 089-22848-00121 and SPM 089-29236-00121), will ensure the following:

(b) The PM and PM10 **net** emissions increase from the CASP modifications **(SSM 089-22848-00121 and SPM 089-29236-00121)** shall be less than twenty-five (25) and fifteen (15) tons, respectively, per ~~year~~ **twelve (12) consecutive month period**, **with compliance determined at the end of each month**. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable to these modifications.

(c) The PM2.5 **net** emissions increase from the CASP modifications (**SSM 089-22848-00121 and SPM 089-29236-00121)** shall be less than ten (10) tons per ~~year~~ **twelve (12) consecutive month period**, **with compliance determined at the end of each month**. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) are rendered not applicable to these modifications.

D.19.1.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10 [326 IAC 2-2]
Nonattainment New Source Review (NSR) Minor Limit PM2.5/SO2 [326 IAC 2-1.1-5]

On June 27, 2008, the U.S. EPA issued Notices of Violation (NOV) to the Permittee for alleged violations regarding excess emissions from the coke oven batteries. Therefore the Permit Shield in Section B - Permit Shield does not shield the Permittee from possible enforcement actions initiated by U.S. EPA, IDEM or citizens. Compliance with the terms of this permit does not serve as proof of compliance for the emission units or the matters addressed in the NOVs. Following resolution of this enforcement action, IDEM will reopen this permit, if necessary, to incorporate a compliance schedule or any new applicable requirements. The standard language of Section B - Permit Shield does not shield any activity on which the permit is silent.

D.20.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10 [326 IAC 2-2]
Nonattainment New Source Review (NSR) Minor Limit PM2.5 [326 IAC 2-1.1-5]

* * *

Compliance with these limits, in conjunction with other limits taken as part of the CASP modification (SSM 089-22848-00121 and SPM 089-29236-00121), will ensure the following:

(f) The PM and PM10 **net** emissions increase from the CASP modifications (**SSM 089-22848-00121 and SPM 089-29236-00121)** shall be less than twenty-five (25) and fifteen (15) tons, respectively, per ~~year~~ **twelve (12) consecutive month period**, **with compliance determined at the end of each month**. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable to these modifications.

(g) The PM2.5 **net** emissions increase from the CASP modifications (**SSM 089-22848-00121 and SPM 089-29236-00121)** shall be less than ten (10) tons per ~~year~~ **twelve (12) consecutive month period**, **with compliance determined at the end of each month**. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) are rendered not applicable to these modifications.

D.20.1.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10 [326 IAC 2-2]
Nonattainment New Source Review (NSR) Minor Limit PM2.5/SO2 [326 IAC 2-1.1-5]

On June 27, 2008, the U.S. EPA issued Notices of Violation (NOV) to the Permittee for alleged violations regarding excess emissions from the coke oven batteries. Therefore the Permit Shield in Section B - Permit Shield does not shield the Permittee from possible enforcement actions initiated by U.S. EPA, IDEM or citizens. Compliance with the terms of this permit does not serve as proof of compliance for the emission units or the matters addressed in the NOVs. Following resolution of this enforcement action, IDEM will reopen this permit, if necessary, to incorporate a compliance schedule or any new applicable requirements. The standard language of Section B - Permit Shield does not shield any activity on which the permit is silent.

Comments from U.S. Steel – Gary Works

On July 16, 2010, 2010, Mr. Mark Jeffery, on behalf of U.S. Steel – Gary Works, submitted comments on the proposed significant modification to the Part 70 permit. The summary of the comments and revisions to the permit (**bolded** language has been added, the ~~strikethrough~~ language has been deleted) is as follows:

Comment 1:

The draft permit incorrectly lists the scrubber discharge pump pressure operating range at 2-3 inches of water. The correct range is 55-70 pounds per square inch (psi).

IDEM, OAQ Response 1:

The requested change has been made. Condition D.18.10 – Scrubber Monitoring has been revised as follows:

D.18.10 Scrubber Monitoring

* * *

(d) When for any one reading, the pump discharge pressure is outside a range of ~~2 and 3 inches of water~~ **55 and 70 pounds per square inch of water (psi)**, or a range established during the latest stack test, the Permittee shall take reasonable response.

Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pump discharge pressure that is outside a range of ~~2 to 3 inches of water~~ **55 and 70 psi**, or a range established during the latest stack test, is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

* * *

Comment 2:

Condition D.18.12 - Parametric Monitoring Notations of the draft permit incorrectly lists the baghouse(s) pressure drop range at 1.0 and 6.0 inches of water. The correct range is 0.5 and 6.0 inches of water.

IDEM, OAQ Response 2:

The requested change has been made. Condition D.18.12 – Parametric Monitoring Notations has been revised as follows:

D.18.12 Parametric Monitoring Notations

The Permittee shall record the pressure drop across each baghouse and cyclone listed in this section, at least once per day when the associated facility/emissions unit is in operation. When for any one reading, the pressure drop across a baghouse is outside the normal range of ~~1.0~~ **0.5** and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

* * *

Comment 3:

Condition D.19.7 - Parametric Monitoring Notations of the draft permit lists the pressure drop range of the baghouse(s) at 1.0 and 6.0 inches of water. U.S. Steel has requested the maximum range be set at 12.0 inches of water.

IDEM, OAQ Response 3:

Condition D.19.7 references the pressure drop range for numerous baghouses of varying sizes and of various design specifications. Therefore, the pressure drop must be evaluated for each baghouse. No change has been made.

Comments from City of Gary, Department of Environmental Affairs

On July 16, 2010, Mr. Peter C. Julovich, AQC Manager, on behalf of the City of Gary, Department of Environmental Affairs, submitted comments on the proposed significant modification to the Part 70 permit. The summary of the comments and revisions to the permit (**bolded** language has been added, the ~~strikethrough~~ language has been deleted) is as follows:

Comment 1:

In order to better document the "contemporaneous period" and netting analysis, will IDEM insert the shutdown date of No. 3 Coke Battery? Is any correspondence from USS notifying IDEM of such plan available? Is quarterly monitoring data available to show production stopped? Did U.S. Steel – Gary Works provide correspondence notifying IDEM, OAQ of the shutdown plan?

IDEM, OAQ Response 1:

All correspondence is available for public viewing on the IDEM Virtual File Cabinet on the Internet at http://www.in.gov/idem/6551.htm.

The No. 3 Coke Oven Battery last operated on September 30, 2005. In addition to documenting the date the No. 3 Coke Battery was shut down, the shutdown date of the No. 3 Coke Battery Precarbonization facility has also been documented in the permit.

Condition A.3 and the facility description boxes of Section D.1 and D.2 have been revised as follows:

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

The integrated steel mill, U.S. Steel-Gary Works consists of the following:

Coal Handling Operation

* * *

(d) One (1) No. 3 Coke Battery Precarbonization facility consisting of three (3) lines Line A, Line B and Line C identified as CH3A0017, CH3B0018 and CH3C0019, constructed prior to October 24, 1974, each with a maximum capacity of 153.5 tons per hour. Particulate matter emissions from the three lines are controlled by electrostatic precipitators (ESP), ESP A, ESP B and ESP C, CH3026, CH3027 and CH3028, exhausting through stacks CH6028, CH6029 and CH6031, respectively.

Note: The No. 3 Coke Battery Precarbonization facility last operated on September 30, 2005. Pursuant to Significant Source Modification 089-28848-001221 and Significant Permit Modification 089-29236-00121, the No. 3 Coke Battery Precarbonization facility will be permanently shutdown and decommissioned.

* * *

Coke Batteries

* * *

(b) No. 3 Coke Battery

(1) One (1) six (6) meter tall vertical flue coke battery with 57 ovens, No. 3 Coke Battery, identified as CP3B0086, constructed in November 1974, with a maximum charging capacity of 217 tons per hour. Excessive coke oven gas back pressure is controlled by three (3) flares lit with internal flare igniters CP3063, CP3064 and CP3065, exhausting to Bypass/Bleeder Flare stacks CP6108, CP6109 and CP 6110.

(2) The No. 3 Coke Battery underfiring system has a maximum combustion heat input capacity of 250 MMBtu per hour, exhausting to stack CP6045, equipped with a continuous opacity monitor (COM).

(3) The No. 3 Coke Battery has a maximum pushing capacity of 161 tons of coke per hour, with particulate emissions controlled by a Mobile Scrubber Car 9119, 9120, 9121 or 9122, identified as CP3038, exhausting to stack CP6046.

(4) The No. 1 Quench Tower, identified as CP3Q0087, constructed in 1975, with a maximum capacity of 322 tons of coke per hour and Nos. 2 and 3 Quench Towers, identified as CP1Q0080 and CP2Q0081 constructed in 1975 with a maximum capacity of 322 tons of coke per hour, equipped with a quench water header and baffle system with sprays. Nos. 2 and 3 Quench Towers service Nos. 2 and 3 Coke Batteries. No. 1 Quench Tower services Nos. 2, 3, 5 and 7 Coke Batteries.

(5) The No. 3 Coke Battery fugitive emissions are generated from charging operations, offtake piping, door leaks, lid leaks and collector main leaks.

Note: The No. 3 Coke Battery last operated on September 30, 2005. Pursuant to Significant Source Modification 089-28848-001221 and Significant Permit Modification 089-29236-00121, the No. 3 Coke Battery will be permanently shutdown and decommissioned.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: One (1) Coal Handling Operation

* * *

(d) One (1) No. 3 Coke Battery Precarbonization facility consisting of three (3) lines Line A, Line B and Line C identified as CH3A0017, CH3B0018 and CH3C0019, constructed prior to October 24, 1974, each with a maximum capacity of 153.5 tons per hour. Particulate matter emissions from the three lines are controlled by electrostatic precipitators (ESP), ESP A, ESP B and ESP C, CH3026, CH3027 and CH3028, exhausting through stacks CH6028, CH6029 and CH6031, respectively.

Note: The No. 3 Coke Battery Precarbonization facility last operated on September 30, 2005. Pursuant to Significant Source Modification 089-28848-001221 and Significant Permit Modification 089-29236-00121, the No. 3 Coke Battery Precarbonization facility will be permanently shutdown and decommissioned.

* * *

SECTION D.2 OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: The Coke Battery Operations

* * *

(b) No. 3 Coke Battery

(1) One (1) six (6) meter tall vertical flue coke battery with 57 ovens, No. 3 Coke Battery, identified as CP3B0086, constructed in November 1974, with a maximum charging capacity of 217 tons per hour. Excessive coke oven gas back pressure is controlled by three (3) flares lit with internal flare igniters CP3063, CP3064 and CP3065, exhausting to Bypass/Bleeder Flare stacks CP6108, CP6109 and CP 6110.

(2) The No. 3 Coke Battery underfiring system has a maximum combustion heat input capacity of 250 MMBtu per hour, exhausting to stack CP6045, equipped with a continuous opacity monitor (COM).

(3) The No. 3 Coke Battery has a maximum pushing capacity of 161 tons of coke per hour, with particulate emissions controlled by a Mobile Scrubber Car 9119, 9120, 9121 or 9122, identified as CP3038, exhausting to stack CP6046.

(4) The No. 1 Quench Tower, identified as CP3Q0087, constructed in 1975, with a maximum capacity of 322 tons of coke per hour and Nos. 2 and 3 Quench Towers, identified as CP1Q0080 and CP2Q0081 constructed in 1975 with a maximum capacity of 322 tons of coke per hour, equipped with a quench water header and baffle system with sprays. Nos. 2 and 3 Quench Towers service Nos. 2 and 3 Coke Batteries. No. 1 Quench Tower services Nos. 2, 3, 5 and 7 Coke Batteries.

(5) The No. 3 Coke Battery fugitive emissions are generated from charging operations, offtake piping, door leaks, lid leaks and collector main leaks.

Note: The No. 3 Coke Battery last operated on September 30, 2005. Pursuant to Significant Source Modification 089-28848-001221 and Significant Permit Modification 089-29236-00121, the No. 3 Coke Battery will be permanently shutdown and decommissioned.

* * *

Comment 2:

Appendix A – Baseline calculations shows a net increase of hazardous air pollutants (HAPs). Can IDEM specify which HAPs are included in the calculation and specify the breakdown of increases/decreases?

IDEM, OAQ Response 2:

The Permittee submitted as part of the application that volatile organic compounds (VOC) emissions from each CASP would be negligible. As a conservative estimate, and used as part of the netting calculations, an assigned value of one (1) pound per hour of VOC from each feed enhancement reactor (FER) and each particle fusion reactor (PFR) was used. Furthermore, the VOC emissions were conservatively assumed to also be categorized as hazardous air pollutants (HAP) or VHAPs.

Although the calculation does not provide detailed HAP speciation, a close approximation can be found in the U.S. EPA AP-42 Chapter 12.2 - Coke Production. Both the FERs and PFRs operate in a manner similar to a non-recovery coke oven battery; coal is heated to drive off volatiles and the resulting process gas emissions are combusted for heat recovery prior to being vented. Therefore, it is reasonable to use the emissions factors for HAPs from AP-42, Chapter 12.2 – Coke Production, Table 12.2.20 - Emission Factors for Coke Production: Nonrecovery Combustion Stacks. See Appendix A of this Addendum to the Technical Support Document for detailed emission calculations.

Comment 3:

Selected City of Gary Schools are being monitored for HAP impacts, including lead (Pb). Can IDEM provide calculations for the increases/decreases of lead?

IDEM, OAQ Response 3:

Since Lead is a HAP, the calculation has been performed in response to the above comment. In addition, a netting analysis under 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) has been performed. See Appendix A of this Addendum to the Technical Support Document for detailed emission calculations and the netting analysis.

IDEM does not amend the Technical Support Document (TSD) because the technical support material is maintained to document the original review that was placed on public notice. This addendum to the TSD documents all comments, responses to comments and changes made from the time the permit was drafted until a final decision is made.

Comments from Elected Officials

1. On July 15, 2010, Mr. Evan Bayh, United States Senator, submitted comments on the proposed significant modification to the Part 70 permit. Mr. Bayh welcomed the project as a sign of economic growth in Northwest Indiana and stated that this project is expected to create and sustain jobs in both construction and manufacturing, while investing in a cleaner energy future. He also stated that investments such as this one are essential to create jobs, maintain a strong and competitive manufacturing base, and establish America as a leader in manufacturing and production of clean energy. Additionally, Mr. Bayh commented positively on the significant reduction in emissions when compared to a traditional coke-making facility, the generation of steam to be fed to the existing turbines, and the zero water discharge.

2. On July 14, 2010, Ms. Shelli VanDenburgh, State Representative, District 19, submitted comments on the proposed significant modification to the Part 70 permit. Ms. VanDenburgh cited significant energy and environmental benefits, job creation, and job sustainability in both the construction and manufacturing industry, as reasons for her support of the proposed significant modification.

3. On July 15, 2010, Mr. Chuck Mosely, State Representative, House District 10, submitted comments on the proposed significant modification to the Part 70 permit. Mr. Mosely welcomed the project as a sign of economic growth in Northwest Indiana. He stated that this project is expected to create and sustain jobs in both construction and manufacturing, while investing in a cleaner energy future. He also stated that investments such as this one are essential to create jobs, maintain a strong and competitive manufacturing base, and establish America as a leader in manufacturing and production of clean energy. Additionally, Mr. Mosely commented positively on the significant reduction in emissions when compared to a traditional coke-making facility, the generation of steam to be fed to the existing turbines, and the zero water discharge.

4. On July 16, 2010, Mr. Rudy Clay, Mayor, City of Gary, submitted comments on the proposed significant modification to the Part 70 permit. Mr. Clay cited significant energy and environmental benefits, including improvements in public health, the environment, and natural resources as reasons he supports the proposed project. Additionally, Mr. Clay considers this modification to be an investment that will reinforce Gary's manufacturing base, which is critical to local job creation and maintenance.

Comments from the General Public and made on Behalf of Organizations

1. On July 14, 2010, Mr. Larry Davis, submitted the following comments on the proposed significant modification to the Part 70 permit.

   - Given the size of the document, Mr. Davis has requested an extension of the comment period for the public.

   - This company, Carbonyx, Inc., and the proposed process, have a limited history. Information on the company is difficult to find, and Mr. Davis would like more information about the company, the principles, and the technology itself. Additionally, Mr. Davis is concerned whether the CASP will perform as expected and permitted.

   - The production of the coke byproduct, Cokonyx, is a new technology. As such, does the operation require new stricter emission standards such as those under new source performance standards (NSPS)? If so, how are they being used in this permit?

   - What effect will the substitution of Cokonyx for a portion of coke have on the blast furnace emissions?

   - Mr. Davis stated that there needs to be very clear restrictions in the permit that limit the raw materials to only coal. At one point in its history, the company (Carbonyx, Inc.) was listed on a polyethylene recycling facility exchange web page. Does this mean that there is possibility of polyethylene being used in the CASP as a binder? The use of polyethylene in blast furnaces is an idea that has been considered as a substitute for coke. This would certainly be a cause for concern due to emissions, like dioxins.

   - Mr. Davis disagreed with conditions in the permit that state that the precarbonization unit for the #2 Coke Oven Battery is a separate unit and that the precarbonization unit is only a coal handling process. The precarbonization unit heats coal to 900 ^{o}F, which drives off a tremendous amount of volatiles. In addition the precarbonization unit for #2 Coke Oven Battery is not equipped with controls for volatiles. Therefore, closing down the #2 Coke Oven Battery would have the greatest impact to the air quality in the communities in Northwest Indiana.

   - Mr. Davis stated a need for technology that not only reduces emissions but also cleans up the existing legacy and brownfields, that exist along the shore of Lake Michigan and is supportive of “Direct Iron Technologies”, which are processes (direct iron and direct smelting) that can eliminate the need for coke and, therefore, the CASP project. These technologies would result in ever greater reductions in air, water, and land pollution and would allow the proposed CASP site to be returned to a clean state, instead of just putting a layer of slag over the site and then building this facility (CASP).

2. On July 14, 2010, Ms. Charlotte Read, on behalf of Save the Dunes, submitted the following comments on the proposed significant modification to the Part 70 permit.

   - Save the Dunes requested an extension to the public comment period for an additional forty-five (45) days, which is the same period of time that the U.S. E.P.A. has to review the construction permit. Furthermore, Ms. Read stated that the permit package is over 700 pages, which is quite a package to ask the public to review intelligently in thirty (30) days.

   - The proposed CASP project is a new process. Ms. Read questioned whether IDEM has the technical capability to evaluate this process and set standards for all aspects of the facility that are more protective of the local environment, Lake Michigan, and the nearby Indiana Dunes National Lakeshore.

- What kinds of additional emissions will be produced during the initial start-up process and before the #5 and #7 Coke Oven Batteries are shut down?

- A co-generation facility has been proposed by U.S. Steel – Gary works as part of the second phase of the project. The optional co-generation capability should be required, due to the potential for saving energy and likely reduction of pollutants.

- The site selected for the CASP project is contaminated by manganese and U.S. Steel – Gary Works plans to cap the site with slag followed by concrete. Ms. Read questions if this would require a health and safety plan for construction workers and if a permit is required by IDEM's Office of Land Management. She also questions if the construction will be protective of the groundwater in the area. Storm water management for the selected site will involve use of an existing pit as a storm water basin. This hole is also a contaminated site and must be excavated and backfilled, and the specific details on backfill material and the nature of replacement material must be made public, as well as any information regarding the lining of the well. The proposed new storm water basin will require changes to the U.S. Steel – Gary Works storm water pollution prevention plan, which is a part of the NPDES permit.

- Save the Dunes supports the use of proven new technologies that improve steelmaking and reduce pollution. Hopefully, the CASP project will turn out to be such a process. However, Save the Dunes is concerned about using a contaminated site for the plant location that is adjacent to a company project to remove benzene from ground water.

- What are the effects of the project on employment and the CASP plant employment?

- Ms. Read commented that copies of the public noticed documents provided at the public meeting and public hearing by IDEM read right-to-left. This format is difficult to read.

3. On July 8, 2010, Mr. John R. Carson, on behalf of URS Corporation, submitted the following comments on the proposed significant modification to the Part 70 permit.

   - The application and the calculations reference a 2008 correspondence from Carbonynx and emissions estimates using Metsim Process Simulator. Is this documentation available?

IDEM, OAQ Response:

1. Public Involvement and Extension of Time

   IDEM published a notice in The Times newspaper in Munster in Lake County on June 7, 2010, informing the public that the two (2) draft U.S. Steel permits were available for public comment. The draft permit documents were made available for review at the City of Gary Public Library, 220 West 5th Avenue, Gary, IN 46402, at IDEM's Northwest Regional Office, 8315 Virginia St, Suite 1, Merrillville, IN 46410, at IDEM's main office in Indianapolis and at http://www.in.gov/ai/appfiles/idem-caats/ on the internet. In addition, the June 7, 2010 notification also informed the public that IDEM would conduct a public hearing and public meeting regarding the draft permits on July 14, 2010, at the Ivy Tech Community College-NW - Multi-Purpose Room. This Public Notice was mailed to interested parties and posted on IDEM's website.

   IDEM, OAQ believes that the length of the comment period was sufficient and appropriate. Under Indiana's air permit rules, specifically 326 Indiana Administrative Code 2-7-17, OAQ gives the public at least 30 days to submit written comments. OAQ set the pubic comment period deadline at July 16, 2010, which made the public notice period 39 days from June 7, 2010. IDEM, OAQ received numerous comments sent by mail and e-mail, as well as oral comments submitted during the public hearing. The technical comments IDEM, OAQ received were detailed and showed extensive review of the draft permit documents.

2. Technical Review of the New Technology (CASP)

IDEM agrees that the production of Cokonyx is a new technology that was developed by a company, Carbonyx, Incorporated, with little history. However, the equipment and many of the processes employed to produce Cokonyx are not new, i.e. coal handling (crushing, drying, conveying), rotary kilns, and tunnel kilns. Each CASP is comprised of components, including pollution control devices, of which the technology and methods of operation are known and are currently utilized in a variety of processes.

Process specific emission rates for the Feed Enhancement Reactors (FERs) and the Particle Fusion Reactors (PFRs) were submitted as part of the permit application. These emission rates were provided to U.S. Steel by Carbonyx, Inc. and were generated using METSIM. METSIM is a PC simulator for metallurgical and chemical engineering processes that can simulate a wide variety of processes. U.S. Steel did not provide METSIM documentation. Since these emission rates are considered unit specific, compliance testing is required.

To determine if the provided emission rates are reasonable, the rates were compared to the emissions factors from AP-42, Chapter 12.2 – Coke Production, Table 12.2.20 - Emission Factors for Coke Production: Nonrecovery Combustion Stacks, and the control devices were taken into account. It is reasonable to expect the emissions from the conversion of coal to Cokonyx to be similar to the emissions associated with converting coal to coke. Both the FERs and PFRs operate in a manner similar to a non-recovery coke oven battery; coal is heated to drive off volatiles and the resulting process gas emissions are combusted for heat recovery prior to being vented. The emissions from combustion of the process gases at the FERs and PFRs are vented to a scrubber, a cyclone, and finally a baghouse prior to being emitted to atmosphere. Additionally, the FER and PFR afterburners are designed with low-NOx burners and staged combustion zones, to allow for the destruction of CO and suppression of NOx formation.

The following table illustrates the potential emissions based on AP-42, Chapter 12.2, Table 12.2.20 emission factors, and the percent reductions (control efficiency) necessary to achieve the emission rates provided by Carbonyx, Incorporated.

Projected Emissions per CASP					
Coal charged per CASP = 375,000 (ton/year)					
Pollutant	PM	PM10/ PM2.5	SO2	NOx	CO
AP-42 Emission Factor (lb/ton coal)	1.8	1.815	9.3	0.71	.05
PTE (tpy)	337.5	340.3	1743.8	133.1	9.4
Guaranteed Emissions (tpy)	34.17	34.17	68.33	42.05	Neg.
% reduction required	89.9 %	90.0%	96%	68%	99.9%

Note: See IDEM, OAQ Response 2 of the Comments from City of Gary, Department of Environmental Affairs Section of this document for a detailed discussion of Volatile Organic Compound (VOC) and Hazardous Air Pollutant (HAP) emissions.

In order to ensure the provided emission rates are not exceeded, the Feed Enhancement Reactors (FERs) and Particle Fusion Reactors (PFRs) are subject to a rigorous testing schedule. A representative number of units from each CASP are subject to compliance testing at the time of startup and testing is required to be repeated every 2.5 years. Since the scheduled startup of the four (4) CASP modules are planned over a period of several years, it is anticipated that the first CASP will have completed its second round of compliance testing prior to the startup of the fourth and last CASP module. This testing schedule will provide IDEM, OAQ with data that can be used to determine if the results are reliable and repeatable over both a period of time and multiple identical units. Compliance monitoring requirements are contained within the permit to ensure the

units and the associated pollution control devices operate properly and within the operating parameters used during the latest compliant stack test.

3. State and Federal Rule Evaluations

For emission units that are subject to requirements under the New Source Performance Standards (NSPSs) [40 CFR 60] and/or the National Emission Standards for Hazardous Air Pollutants (NESHAPs) [40 CFR 63], the applicable requirements are referenced by citation in Sections H.1 (40 CFR 60, Subpart Dc), H.2 (40 CFR 60, Subpart Y), H.3 (40 CFR 60, Subpart IIII), and H.4 (40 CFR 63, Subpart ZZZZ), and the referenced subparts are included, in entirety, as Attachment B- 40 CFR 60, Subpart Dc, Attachment C - 40 CFR 60, Subpart Y, Attachment D – 40 CFR 60, Subpart IIII, and Attachment E – 40 CFR 63, Subpart ZZZZ. The Federal Rule Applicability Determination Section of the Technical Support Document (TSD) to this permitting action contains a detailed evaluation of the determinations.

During October 2009, U.S. Steel utilized Cokonyx at the U.S. Steel Fairfield Works No. 8 Blast Furnace (Birmingham, Alabama) for the purpose of evaluating blast furnace performance. During this production trial, Cokonyx was collected and tested and the physical and chemical properties were found to be comparable to typical blast furnace coke. Between the period of October 13, 2009 and October 31, 2009, a blast furnace production trial, using Cokonyx, was performed at the U.S. Steel Fairfield Works No. 8 Blast Furnace. The blast furnace operating parameters were monitored and no difference was found in the blast furnace performance. Based on these results, U.S. Steel contends that the use of Cokonyx in combination with coke does not affect blast furnace emissions. This analysis has been provided as Appendix B to the Technical Support Document (TSD) to this permitting action.

A source's potential emissions are based on the source's normal operations under its physical and operational design. Operations during periods of startup, shutdown, or malfunction are not considered "normal operation." As a consequence, emissions during such periods have not historically been required to be included in netting calculations. Therefore, emissions during the initial startup of the new processes, also considered a reasonable shakedown period, are not required to be evaluated. Upon completion of a reasonable shakedown period of the first two (2) CASP modules and the associated material handling, U.S. Steel is required to permanently shutdown and decommission the No. 3 Coke Oven Battery and the No. 3 Pre-carbonization facility. U.S. Steel – Gary Works will then commence construction on the second phase of the project. Phase 2 will involve changes to the CASP material handling system and construction of two (2) additional CASP modules. After startup of the third CASP module, either No. 5 Coke Oven Battery or No. 7 Coke Oven Battery will be permanently shutdown and decommissioned. The remaining coke oven battery, No. 5 or No. 7, will be permanently shutdown and decommissioned upon startup of the fourth and last CASP module. This alternation of starting up modules and shutting down existing facilities ensures that the net emissions increase of the CASP modification remains below the significant levels, and therefore minor, throughout the duration of the modification.

IDEM has no information regarding Carbonyx, Incorporated being listed on a polyethylene recycling facility exchange web page. The calculations were submitted as part of the application for this permitting action certified by the Responsible Official. Therefore, this project was evaluated using coal as the only raw material. The emissions and necessary limits were clearly derived from the calculations and use only the specifications of coal and explicitly list coal as the material being fed to the CASP modules. The descriptions of all facilities involved with the transfer of raw material to the CASPs identify coal as the material in question. A change to the raw material feed would require additional permitting. Raw material is fed to the CASPs via the following facilities: CASP A coal feed hopper No.2, the CASP B coal feed hopper No.2, the CASP C coal feed hopper No.2, and the CASP D coal feed hopper No.2. The input of coal to each of these units is limited to 375,000 tons of coal per year. Therefore, no additional limits are necessary. No change was made to the permit as a result of this comment.

4. No. 2 Coke Oven Battery and Pre-carbonization unit

Coke oven batteries and pre-carbonization units do not create volatile organic compounds (VOCs). Rather, VOCs contained within the coal are driven out when coal is subjected to the high heat of the pre-carbonization units and the coke oven batteries. Since none of the pre-carbonization units or coke oven batteries permitted at U.S. Steel – Gary Works are equipped with control devices for VOCs, the amount of VOCs released is a function of the amount of coal charged and does not increase if the coke oven battery has a pre-carbonization unit associated with it. See IDEM, OAQ Response (6) of this section for a response to the No. 2 Coke Oven Battery impact on air quality.

5. Co-generation facility and Direct Iron Technologies

The requirements included in the draft permit are based on the design specifications submitted by the Permittee. The draft permit requires the Permittee to demonstrate compliance with the limitations established in the permit, including federal and state regulations that are applicable to the new and affected emission units. IDEM does not have the authority to require additional controls or emissions reductions beyond those necessary to meet the limits included and established in this permit.

6. IDEM, OAQ recognizes that concerns outside of air quality are important to those who expressed them; however, they do not have a direct impact on how IDEM, OAQ reviews and makes decisions on air permit applications. IDEM, OAQ's air permit review, by law, cannot address issues for which it does not have direct regulatory authority. Therefore, these comments will not be addressed as part of U.S. Steel's CASP project.

Comments of Support from General Public and made on Behalf of Organizations

These Commenters extended their support to this project and urged IDEM, OAQ to issue the construction and operating permits for the CASP project.

1. On July 14, 2010, Mr. Tom Szumila, on behalf of Carbonyx, Incorporated and CEO Sid Gaur, submitted the following comments on the proposed significant modification to the Part 70 permit.

This cutting-edge technology is arguably a breakthrough technology for the steel industry, and we are proud to partner with U.S. Steel in this implementation. U.S. Steel is committed to environmental stewardship and performance. By issuing this permit, U.S. Steel will be able to employ our revolutionary technology to significantly reduce air and water emissions when compared to a traditional coke-making facility. The facility will have state-of-the-art controls for sulfur dioxide and nitrogen oxide and will operate under the rigorous testing and monitoring prescribed by the draft permit. By granting the permit, IDEM will assist U.S. Steel in achieving a net air emissions reduction for particulate matter, sulfur dioxide, carbon monoxide and nitrogen oxides. In addition, the improved air quality for the region through U.S. Steel's use of the Carbonyx technology, U.S. Steel will also be able to reduce the company's carbon footprint in Gary and move towards a cleaner energy future. The process generates steam, which will be fed to the existing Gary Works turbine generator in order to reduce the amount of power commercially purchased by the plant, helping to reduce the facility's carbon footprint. Importantly, there is zero water discharge with the process, helping protect the Great Lakes ecosystem. Investments such as U.S. Steel's proposed Carbon Alloy Synthesis Program are essential in ensuring a sustainable steel industry now and in the future. I encourage you to award this permit so that U.S. Steel can continue its commitment to environmentally responsible steelmaking in Gary.

2. On July 14, 2010, Ms. Marjory Crawford, submitted the following comments on the proposed significant modification to the Part 70 permit.

   Ms. Crawford has stated that Gary, Indiana, situation as it is on the southern tip of Lake Michigan, is potentially the commercial, recreational and entertainment center of the Midwest. A century ago this position made it a great industrial center, but no longer. The steel industry has moved elsewhere. Gary Indiana, is the site of fresh water and self-renewing beaches. There is precedent in progress to the west of Gary in preparing the lakeshore for commercial and recreational use. The jobs required to build and maintain commercial and recreational use are unlimited and permanent.

3. On July 14, 2010, Ms. Kay Nelson, on behalf of the Northwest Indiana Forum, submitted comments in support of the proposed significant proposed project. Ms. Nelson stated that the purpose of the Northwest Indiana Forum is the retention and creation of quality employment opportunities that sustain and enhance the environment and quality of life for the residents of Northwest Indiana. Ms. Nelson further stated numerous reasons why this proposed project supports the purpose of the Northwest Indiana Forum.

4. During the Public Comment Period, the comments on the proposed significant modification to the Part 70 permit were received from the following commenters:

   (a) Mr. Michael Summers, Business Manager, on behalf of the Iron Workers Local #395;

   (b) Mr. Raymond E. Kasmark, Business Manager, Local Union 697, on behalf of the International Brotherhood of Electrical Workers;

   (c) On behalf of the Indiana/Kentucky Regional Council of Carpenters and Millwrights (Hobart Regional Office);

   Mr. Aaron Carlberg, Director of the State of Indiana, Indiana/Kentucky Regional Council of Carpenters and Millwrights;
   Mr. Michael Stavitzke, Senior Business Representative, Indiana/Kentucky Regional Council of Carpenters and Millwrights;
   Mr. Daniel Brown, Senior Business Representative, Indiana/Kentucky Regional Council of Carpenters and Millwrights;

   (d) Mr. Brian Glynn, Business Manager, Heat and Frost Insulators, Local 17, on behalf of the Heat and Frost Insulators, Local 17, AFL-CIO;

   (e) Mr. John F. Penn, Vice President and Regional Manager, on behalf of the Laborers' International Union of North America (LIUNA) Midwest Region;

   (f) Mr. Frank DeGraw, Secretary-Treasure & Business Manager, Indiana Laborers District Council, on behalf of the Indiana Laborers District Council;

   (g) Mr. Kevin Roach, Business Manager, Laborers' International Union of North America Local #41, on behalf of the Laborers' International Union of North America Local #41;

   (h) Mr. James Buchanan, Business Manager, Pipe Fitters' Association, Local Union 597, U.A., on behalf of the Pipe Fitters Association, Local Union 597, U.A.;

   (i) Mr. Chris Hernandez, President, Northwestern Indiana Building and Construction Trades Council, on behalf of the Northwestern Indiana Building and Construction Trades Council, AFL-CIO;

(k) Mr. Thomas M. Conway, International Vice President (Administration), on behalf of the United Steelworkers;

(l) Mr. Newton B. Jones, International President, on behalf of the International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers;

(m) Mr. James Boland, President, on behalf of the International Union of Bricklayers and Allied Craftworkers (BAC);

(n) Mr. Paul M. Maday, Business Manager & Secretary Treasure, Boilermakers Local #374, on behalf of the Boilermakers & Iron Ship Builders; and,

(o) Mr. David Fagan, Financial Secretary, on behalf of the International Union of Operating Engineers, Local 150, AFL-CIO.

The above received comments were in support of the CASP Project and cited environmental and economic reasons.

IDEM, OAQ Response:

IDEM, OAQ acknowledges the opinion expressed by all Commenters who support this project.

Appendix A: Emissions Calculations
Summary of CASP Project Emissions
Hazardous Air Polluntants (HAPs)

Company Name: U.S. Steel - Gary Works
Company Address: One North Broadway, Gary, Indiana 46402
Significant Source Modification No.: 089-28848-00121
Significant Permit Modification No.: 089-29236-00121
Reviewer: Jenny Acker
Date: July 21, 2010

375,000 Coal (tpy) Annual Usage per CASP

HAP	E.F. (lb/ton coal)	Per CASP PTE (tpy)
Benzene	4.80E-04	9.00E-02
Toluene	5.10E-04	9.56E-02
Naphthalene	2.70E-04	5.06E-02
Phenol	7.10E-05	1.33E-02
Benzo(a)pyrene[1]	1.00E-06	1.88E-04
Acetone	2.30E-03	4.31E-01
Bromomethane	5.60E-04	1.05E-01
Chloromethane	7.60E-04	1.43E-01
Methylene Chloride	6.60E-04	1.24E-01
Carbon Disulfide	1.60E-05	3.00E-03
2-Butanone	6.30E-05	1.18E-02
1,1,1-trichloroethane	2.50E-06	4.69E-04
Ethylbenzene	3.20E-06	6.00E-04
m-/p-Xylene	1.30E-05	2.44E-03
o-Xylene	3.20E-06	6.00E-04
Idomethane	6.30E-06	1.18E-03
Dobromomethane	1.20E-05	2.25E-03
Trichlorofluoromethane	8.20E-06	1.54E-03
n-Hexane	1.50E-05	2.81E-03
Isooctane	1.60E-05	3.00E-03
P-Cymene	1.10E-06	2.06E-04
Cumene	1.40E-06	2.63E-04
2-Hexanone	2.80E-05	5.25E-03
Ethyl Methacrylate	3.40E-06	6.38E-04
Styrene	6.90E-06	1.29E-03
Vinyl Acetate	6.90E-06	1.29E-03
1,2,3-Trichloropropane	4.40E-06	8.25E-04
Chloroform	1.10E-05	2.06E-03
Dibromochloromethane	2.40E-07	4.50E-05
1,1,2-Trichloroethane	5.80E-07	1.09E-04
Bromoform	1.20E-06	2.25E-04
4-Methyl-2-Pentanone	8.90E-06	1.67E-03

HAP	E.F. (lb/ton coal)	Per CASP PTE (tpy)
1,1,2,2-Tetrachloroethane	2.00E-06	3.75E-04
1,4-Dichloro-2-butene	1.40E-06	2.63E-04
Tetrachloroethane	4.10E-07	7.69E-05
Tert-Butyl methyl ether	4.70E-08	8.81E-06
Chlorobenzene	1.20E-06	2.25E-04
Dimethyl Sulfide	3.20E-06	6.00E-04
Antimony	1.30E-04	2.44E-02
Arsenic	1.30E-03	2.44E-01
barium	1.30E-04	2.44E-02
Beryllium	2.00E-05	3.75E-03
Cadmium	1.80E-04	3.38E-02
Chromium	6.30E-04	1.18E-01
Copper	2.80E-03	5.25E-01
Manganese	3.00E-04	5.63E-02
Mercury	3.30E-04	6.19E-02
Nickel	5.80E-04	1.09E-01
Phosphorus	1.40E-02	2.63E+00
Selenium	3.20E-04	6.00E-02
Silver	4.50E-05	8.44E-03
Thallium	1.80E-04	3.38E-02
Zinc	5.10E-03	9.56E-01
Lead	3.10E-03	5.81E-01
	Total:	**6.56E+00**

Methodology
- E.F. (Emissions Factors) (lb/ton Coal) from U.S. EPA AP-42, Chapter 12.2 – Coke Production, Table 12.2.20 - Emission Factors for Coke Production: Nonrecovery Combustion Stacks
- PTE per CASP (tpy) = E.F. (lb/ton coal) x Annual Coal Usage per CASP (tons) x 1/(2000 lb/ton)

Appendix A: Emissions Calculations
Summary of CASP Project Emissions - Lead

Company Name: U.S. Steel - Gary Works
Company Address: One North Broadway, Gary, Indiana 46402
Significant Source Modification No.: 089-28848-00121
Significant Permit Modification No.: 089-29236-00121
Reviewer: Jenny Acker
Date: July 21, 2010

1. Phase 1 of CASP Project Netting Analysis

	Lead (Pb) (tpy)	
CASP C & D	1.16	
Increased Utilization	3.07E-05	Railcar heater system @ thaw shed (unlimited combustion of NG)
Phase 1 PTE	*1.16*	
#3 COB Pre-Carb Credits	0.00	
#3 Coke Oven Credits	1.47	
Phase 1 - Net Emissions Increase (NEI):	**-0.31**	Phase 1 PTE - #3 COB Pre-Carb & Coke Oven Battery Credits
Significant Thresholds:	**0.60**	

2. Phase 2 of CASP Project Netting Analysis

	Lead (Pb) (tpy)	
Phase 1 - Net Emissions Increase (NEI):	-0.31	
CASP A & B	1.16	
Phase 2 PTE	*0.86*	
#5 / #6 Quench Tower Credits	0.00	
#5 & #7 Coke Oven Credits	0.89	
Phase 2 - Net Emissions Increase (NEI):	**-0.03**	Phase 2 PTE - #5 / #6 Quench Tower - #5 & #7 COB Coke Oven Battery Credits
Significant Thresholds:	**0.60**	

3. Summary of Baseline and Future Allowable Emissions

Units/Processes to be Shutdown as Part of Project									
	Lead (Pb) 2002				Lead (Pb) 2003				Average
Units/Processes	Thoughput Rate (tons/coal)	E.F. (lb/ton coal)	Capture/Control (%)	Emissions (tpy)	Thoughput Rate (tons/coal)	E.F. (lb/ton coal)	Capture/Control (%)	Emissions (tpy)	Emissions (tpy)
#3 COB									
underfire	988,833	0.00	0.00%	0.00	903,729	0.00	0.00%	0.00	0.00
charging	988,833	0.00	0.00%	0.00	903,729	0.00	0.00%	0.00	0.00
door leaks	988,833	0.00	0.00%	0.00	903,729	0.00	0.00%	0.00	0.00
pushing	988,833	1.39E-05	88.84%	1.53	903,729	1.39E-05	88.84%	1.40	1.47
topside	988,833	0.00	0.00%	0.00	903,729	0.00	0.00%	0.00	0.00
Totals:				**1.53**				**1.40**	**1.47**
#3 COB Precarb Facililty	988,833	0.00	97.99%	**0.00**	903,729	0.00	97.99%	**0.00**	**0.00**
#5 COB									
underfire	378,758	0.00	0.00%	0.00	377,265	0.00	0.00%	0.00	0.00
charging	378,758	0.00	0.00%	0.00	377,265	0.00	0.00%	0.00	0.00
door leaks	378,758	0.00	0.00%	0.00	377,265	0.00	0.00%	0.00	0.00
pushing	378,758	1.39E-05	91.77%	0.43	377,265	1.39E-05	91.77%	0.43	0.43
topside	378,759	0.00	0.00%	0.00	377,265	0.00	0.00%	0.00	0.00
Totals:				**0.43**				**0.43**	**0.43**
#7 COB									
underfire	396,744	0.00	0.00%	0.00	396,167	0.00	0.00%	0.00	0.00
charging	396,744	0.00	0.00%	0.00	396,167	0.00	0.00%	0.00	0.00
door leaks	396,744	0.00	0.00%	0.00	396,167	0.00	0.00%	0.00	0.00
pushing	396,744	1.39E-05	91.77%	0.45	396,167	1.39E-05	91.77%	0.45	0.45
topside	396,744	0.00	0.00%	0.00	396,167	0.00	0.00%	0.00	0.00
Totals:				**0.45**				**0.45**	**0.45**
#5,6 Coke Quench Towers	775,502	0.00	74.99%	**0.00**	773,432	0.00	74.99%	**0.00**	**0.00**

Lead - PTE (tpy)				
Railcar heater system assc. with thaw shed	Capacity (MMBtu/hr)	Throughput (MMscf/yr)	E.F (lb/mmscf)	Emissions (tpy)
Limited Combustion of NG [1)]	14	12.084	0.0005	3.02E-06
Unlimited NG Combustion	14	122.64	0.0005	3.07E-05

Baseline Emissions are assumed to be zero

Methodology:
Throughput (mmscf/yr) = Capacity (MMBtu/hr) * 1 MMscf /1000 MMBtu * 8760 hrs/yr
Emisions = E.F. (lb/mmscf) * throughput (mmscf/yr) * 1 ton/2,000 lbs
[1)] Thoughput (mmscf/yr) based on existing PSD minor limitations.

Appendix A: Emissions Calculations
Summary of CASP Project Emissions
(page 1 of 2)

Company Name: **U.S. Steel - Gary Works**
Company Address: **One North Broadway, Gary, Indiana 46402**
Significant Source Modification No.: **089-28848-00121**
Significant Permit Modification No.: **089-29236-00121**
Reviewer: **Jenny Acker**
Date: **July 21, 2010**

1. Summary of Emissions Associated with CASP Project

Emissions per CASP Module	CO (tpy)	NOx (tpy)	PM (tpy)	PM10 (tpy)	PM2.5 (tpy)	SO2 (tpy)	VOC (tpy)	HAPs (tpy)
FER (Total of 4)	1.93E-06	14.02	7.01	7.01	7.01	1.75	4.38	4.38
PFR (Total of 2)	8.06E-05	28.03	27.16	27.16	27.16	66.58	2.19	2.19
Generators & Fire Pump	7.13	26.86	0.83	0.48	0.48	0.47	0.75	1.36E-02
Dust Collectors	--	--	17.20	17.20	17.20	--	--	--
Cooling Towers	--	--	6.86	6.86	6.86	--	neg	neg
Coal Tar Tanks	--	--	--	--	--	--	5.00	5.00
Diesel Fuel Tanks	--	--	--	--	--	--	1.00	1.00
Total per CASP:	7.13	68.91	59.06	58.71	58.71	68.80	13.32	12.58
Phase 1 - CASP C & D Material Handling Emissions								
Material Transfer	--	--	32.17	15.22	2.30	--	--	--
Storage Piles	--	--	4.56	2.28	0.34	--	--	--
Road Emissions	--	--	37.65	10.03	1.00	--	--	--
Totals:	--	--	74.38	27.53	3.65	--	--	--
Increased Utilization								
Railcar heater system with thaw shed	5.15	6.13	0.47	0.18	0.18	0.04	0.34	neg
Coal Handling Processes	0.00	0.00	7.88	4.73	4.73	0.00	0.00	0.00
Totals:	5.15	6.13	8.35	4.91	4.91	0.04	0.34	0.00
Contemporaneous Emissions (Prior)	113.65	70.41	92.59	47.49	46.08	11.31	30.87	neg.
Phase 1 - Units Shutdown Prior to Start of Project.								
#3 COB (shutdown)	-263.32	-501.055	-288.195	-255.62	-255.62	-149.515	-148.95	
#3 Coke Battery Pre-Carb Facility (shutdown)	-2554.96	-32.175	-75.445	-76.87	-76.87	-4.73	-374.25	
Phase 2 - Emissions Increase from Phase 1 (includes throughput increases & new emission points):								
Material Transfer	--	--	51.02	26.62	3.65	--	--	--
Storage Piles	--	--	3.98	6.29	0.94	--	--	--
Road Emissions	--	--	17.46	4.65	0.47	--	--	--
Totals - Phase 2 New Emissions:	--	--	72.47	37.56	5.06	--	--	--
Phase 2 - Units Shutdown as Part of the Project.								
#5 COB	161.02	329.25	124.94	134.72	134.72	107.73	98.06	
#7 COB	168.87	345.31	122.72	107.83	107.83	66.23	102.84	
#5 / #6 Coke Quench Towers	0.00	0.00	28.06	6.42	6.42	0.00	1.36	

Appendix A: Emissions Calculations
Summary of CASP Project Emissions
(page 2 of 2)

2. Phase 1 of CASP Project Netting Analysis

	CO (tpy)	NOx (tpy)	PM (tpy)	PM10 (tpy)	PM2.5 (tpy)	SO2 (tpy)	VOC (tpy)	HAPs (tpy)
CASP C & D	14.27	137.82	118.12	117.42	117.42	137.60	26.64	25.17
Phase I Material Handling Emissions	--	--	74.38	27.53	3.65	--	--	--
Increased Utilization	5.15	6.13	8.35	4.91	4.91	0.04	0.34	0.00
Phase 1 PTE	**19.42**	**143.96**	**200.85**	**149.86**	**125.98**	**137.64**	**26.97**	**25.17**
Net Contemporaneous Emissions Increases	113.65	70.41	92.59	47.49	46.08	11.31	30.87	neg.
#3 COB Pre-Carb Credits	-2554.96	-32.18	-75.45	-76.87	-76.87	-4.73	-374.25	0.00
Phase 1 - Emissions Increase Prior to #3 COB Credits	*-2421.89*	*182.19*	*217.99*	*120.48*	*95.19*	*144.22*	*-316.40*	*25.17*
#3 Coke Oven Credits	-263.32	-501.06	-288.20	-255.62	-255.62	-149.52	-148.95	0.00
Phase 1 - Net Emissions Increase (NEI):	**-2685.21**	**-318.86**	**-70.20**	**-135.14**	**-160.43**	**-5.30**	**-465.35**	**25.17**
Significant Thresholds:	100	40	25	15	10	40	25	n/a

3. Phase 2 of CASP Project Netting Analysis

3.a) Startup of 3rd CASP	CO (tpy)	NOx (tpy)	PM (tpy)	PM10 (tpy)	PM2.5 (tpy)	SO2 (tpy)	VOC (tpy)	HAPs (tpy)
Phase 1 - Net Emissions Increase (NEI)	-2685.21	-318.86	-70.20	-135.14	-160.43	-5.30	-465.35	25.17
Emissions from Startup of 3rd CASP (A or B)	7.13	68.91	59.06	58.71	58.71	68.80	13.32	12.58
Phase 2 Material Handling Emissions Increase from Phase 1	--	--	72.47	37.56	5.06	--	--	--
No. 5 COB Baseline	161.02	329.25	*124.94*	*134.72*	*134.72*	*107.73*	98.06	0.00
No. 7 COB Baseline	*168.87*	*345.31*	122.72	107.83	107.83	66.23	*102.84*	0.00
Net Emissions Increase after 3rd CASP: [1)]	**-2839.10**	**-579.20**	**-61.39**	**-146.69**	**-204.48**	**-2.72**	**-550.09**	**37.75**
Emissions from Startup of 4th CASP (A or B)	7.13	68.91	59.06	58.71	58.71	68.80	13.32	12.58
Remaining Baseline Credits (No.5 or No. 7 COB)	168.87	345.31	124.94	134.72	134.72	107.73	102.84	0.00
#5 / #6 Coke Quench Towers Shutdown	0.00	0.00	28.06	6.42	6.42	0.00	1.36	--
Net Emissions Increase after 4th CASP:	**-3000.84**	**-855.59**	**-155.32**	**-229.12**	**-286.91**	**-41.65**	**-640.96**	**50.33**

[1)] U.S. Steel - Gary Works has the option to shut down either #5 COB or #7 COB within 180 days after startup of the third CASP Module. Therefore, the lowest creditable emissions were used to calculate the NEI after the third CASP. The remaining emissions are used to calculate the NEI after the startup of the fourth CASP and the completion of the project.

Appendix A: Emissions Calculations
Baseline Emissions

Company Name: U.S. Steel - Gary Works
Company Address: One North Broadway, Gary, Indiana 46402
Significant Source Modification No.: 089-28848-00121
Significant Permit Modification No.: 089-29236-00121
Reviewer: Jenny Acker
Date: July 21, 2010

Units/Processes to be Shutdown as Part of Project

Units/Processes	CO			NOx			PM			PM10/PM2.5			SO2			VOC		
	2002	2003	Average	2002	2003	Average	2002	2003	Average	2002	2003	Average	2002	2003	Average	2002	2003	Average
#3 COB																		
underfire	222.49	203.34	212.92	514.19	469.94	492.07	232.38	212.38	222.38	222.83	203.66	213.25	138.44	126.52	132.48	153.27	140.08	146.68
charging	0	0	0.00	0	0	0.00	0.2	0.18	0.19	0.1	0.09	0.10	0	0	0.00	0	0	0.00
door leaks	1.84	1.6	1.72	0		0.00	3.96	3.61	3.79	3.96	3.61	3.79	0	0	0.00	0.3	0.27	0.29
pushing	50.43	46.09	48.26	9.39	8.59	8.99	63.45	58	60.73	27.59	25.22	26.41	17.8	16.27	17.04	1.98	1.81	1.90
topside	0.44	0.41	0.43	0	0	0.00	1.19	1.04	1.12	1.14	1.08	1.11	0	0	0.00	0.1	0.09	0.10
Totals:	275.2	251.44	**263.32**	523.58	478.53	**501.06**	301.18	275.21	**288.20**	255.62	233.66	**244.64**	156.24	142.79	**149.52**	155.65	142.25	**148.95**
#3 COB Precarb Facility	2669.85	2440.07	**2554.96**	33.62	30.73	**32.18**	78.84	72.05	**75.45**	76.87	70.25	**73.56**	4.94	4.52	**4.73**	391.08	357.42	**374.25**
#5 COB																		
underfire	141.28	140.72	141.00	326.3	325.01	325.66	105.11	104.69	104.90	100.86	100.47	100.67	55.45	56.23	55.84	97.34	96.96	97.15
charging	0	0	0.00	0	0	0.00	0.19	0.19	0.19	0.09	0.09	0.09	0	0	0.00	0	0	0.00
door leaks	0.57	0.57	0.57	0	0	0.00	1.52	1.51	1.52	1.52	1.51	1.52	0	0	0.00	0.11	0.11	0.11
pushing	19.32	19.24	19.28	3.6	3.58	3.59	17.92	17.85	17.89	7.79	7.76	32.01	6.82	6.79	51.89	0.76	0.75	0.76
topside	0.17	0.17	0.17	0	0	0.00	0.45	0.45	0.45	0.44	0.43	0.44	0	0	0.00	0.04	0.04	0.04
Totals:			**161.02**			**329.25**			**124.94**			**134.72**			**107.73**			**98.06**
#7 COB																		
underfire	147.99	147.77	147.88	341.79	341.3	341.55	101.76	101.62	101.69	97.6	97.46	97.53	59.13	59.05	59.09	101.96	101.81	101.89
charging	0	0	0.00	0	0	0.00	0.2	0.2	0.20	0.1	0.1	0.10	0	0	0.00	0	0	0.00
door leaks	0.6	0.59	0.60	0	0	0.00	1.59	1.58	1.59	1.59	1.58	1.59	0	0	0.00	0.12	0.12	0.12
pushing	20.23	20.2	20.22	3.77	3.76	3.77	18.77	18.75	18.76	8.16	8.15	8.16	7.14	7.13	7.14	0.79	0.79	0.79
topside	0.18	0.18	0.18	0	0	0.00	0.48	0.48	0.48	0.46	0.46	0.46	0	0	0.00	0.04	0.04	0.04
Totals:			**168.87**			**345.31**			**122.72**			**107.83**			**66.23**			**102.84**
#5,6 Coke Quench Towers	0	0	**0.00**	0	0	**0.00**	28.09	28.02	**28.06**	6.43	6.41	**6.42**	0	0	**0.00**	1.36	1.35	**1.36**

Appendix A: Emissions Calculations
Increased Utilization
(Future Allowable - Baseline)

Company Name: **U.S. Steel - Gary Works**
Company Address: **One North Broadway, Gary, Indiana 46402**
Significant Source Modification No.: **089-28848-00121**
Significant Permit Modification No.: **089-29236-00121**
Reviewer: **Jenny Acker**
Date: **July 21, 2010**

Unit/Processes	Worst Case Future Allowable Emissions (tpy)																	
	CO			NOx			PM			PM10/PM2.5			SO2			VOC		
	E.F.	MMBtu/hr	PTE	E.F.	MMBtu/hr	PTE	E.F.	MMBtu/hr	PTE	E.F.	MMBtu/hr	PTE	E.F.	MMBtu/hr	PTE	E.F.	MMBtu/hr	PTE
Railcar heater system assc. with thaw shed (Natural Gas)	84	14	5.15	100	14	6.13	7.6	14	0.47	3	14	0.18	0.6	14	0.04	5.5	14	0.34
Future Allowable Total:			**5.15**			**6.13**			**0.47**			**0.18**			**0.04**			**0.34**
Baseline Emissions:			0.00			0.00			0.00			0.00			0.00			0.00
Increased Utilization:			**5.15**			**6.13**			**0.47**			**0.18**			**0.04**			**0.34**

Baseline emissions = 0
PTE = E.F. (lb/MMBtu) x MMBtu/hr x 8760 (hrs/yr) x 1/(2000 lb/ton)

Worst Case Future Allowable Emissions (tpy)					
Coal Handling Processes	Stack ID	PM		PM10/PM2.5	
		(lb/hr)	(tpy)	(lb/hr)	(tpy)
Railcar Dumper (RCD-1)	8A	0.2	0.876	0.12	0.5256
	8B	0.2	0.876	0.12	0.5256
Reclaim Hopper (RCH-1)	DC-6	0.2	0.876	0.12	0.5256
Car Dump Hopper 1/C1 (FS-8)	F1	0.2	0.876	0.12	0.5256
Car Dump Hopper 2/C1 (FS-9)	F2	0.2	0.876	0.12	0.5256
Car Dump Hopper 3/C1 (FS-10)	F3	0.2	0.876	0.12	0.5256
Trnsfr pt C1/C2 (FS-2)	F4	0.2	0.876	0.12	0.5256
Reclaim Hopper/C2 (FS-14)	F5	0.2	0.876	0.12	0.5256
Sceen Trnsfr/C2 (FS-3)	F7	0.2	0.876	0.12	0.5256
Totals:			7.884		4.7304

Baseline Emissions = 0
PM/PM10 emissions (tpy) based on limited permitted emissions (lb/hr) at 8760 hrs of operation per year.
PM/PM10/PM2.5 (tpy) = PM/PM10/PM2.5 (lb/hr) x 8760 (hrs/yr) x 1/(2000 lb/ton)
PM10 = PM2.5

Appendix A: Emissions Calculations
Contemporaneous Emissions

Company Name: U.S. Steel - Gary Works
Company Address: One North Broadway, Gary, Indiana 46402
Significant Source Modification No.: 089-28848-00121
Significant Permit Modification No.: 089-29236-00121
Reviewer: Jenny Acker
Date: July 21, 2010

Company	Permit #	Date Issued	PM	PM10	PM2.5	SO2	NOx	VOC	CO
1(a) stockhouse baghouse									
USS Gary	SPM 089-27690-00121	10/5/2009	7.54	10.82	9.41	--	--	--	--
1(b) SPM - CAIR (opted-in)									
USS Gary	SPM 089-26519-00121	2/17/2009	--	--	--	--	--	--	
1(c) RCRA Groundwater Remediation									
USS Gary	AA 089-27151-00121	1/12/2009	--	--	--	--	--	2.5	--
1(d) USS Gary purchased Gary Coal Processing, LP. purchase did not effect the PTE of USS Gary									
Since Gary Coal Processing, LP was considered "one-source" the emissions already were considered as part of USS Gary's PTE									
USS Gary	AA 089-26246-00121	4/24/2008	--	--	--	--	--	--	--
1(e) Initial Part 70 Operating permit									
USS Gary	TV 089-7663-00121	8/18/2006	--	--	--	--	--	--	--
1(f) Appeal Resolution - included correcting SIP limits to match properly reflect rule limits.									
USS Gary	SPM 089-23680-00121	10/22/2007	--	--	--	--	--	--	--
1(g) BF #14 reline and production increase									
USS Gary	SSM 089-20118-00121	10/20/2005	4.2	3.8	3.8	7.2	2.4	0.054	99
1(h) 84" hot strip mill									
USS Gary	SSM089-19709-00121	5/2/2005	--	--	--	--	--	1.06	--
2(a) Name change and revisions to compliance monitoring									
IMS Division, Tube City IMS	SPM 089-23679-00132	4/19/2010	--	--	--	--	--	--	--
2(b) Part 70 Operating permit									
IMS Division, Tube City IMS	TV 089-5630-00132	8/17/2006	--	--	--	--	--	--	--
3(a) Adjusted types of materials used. No change in source PTE									
South Shore Slag	AA 089-28755-00133	1/19/2010	--	--	--	--	--	--	--
3(b) Added material handling equipment									
South Shore Slag	SMP 089-28293-00133	11/30/2009	22.68	9.89	9.89	2.32	35.34	2.88	7.61
3(c) Descriptive changes									
South Shore Slag	AA 089-28128-00133	7/14/2009	--	--	--	--	--	--	--
3(d) Name Change									
South Shore Slag	AA 089-26455-00133	4/29/2008	--	--	--	--	--	--	--
3(e) Initial Part 70 Operating permit									
South Shore Slag	TV 089-7719-00133	6/29/2006	--	--	--	--	--	--	--
4(a) Part 70 Operating permit									
Oil Technology, Inc.	TV 089-24654-00171	1/29/2008	--	--	--	--	--	--	--
4(b) Addition of recycling tanks									
Oil Technology, Inc.	MSM 089-24500-00171	5/25/2007	20.2	3.94	3.94	0	0	16	0
5(a) Addition of a portable back-up stacker									
Central Teaming Comp	MPM 089-28211-00172	10/2/2009	3.92	1.77	1.77	-0.4	-0.63	-0.05	-0.13
5(b) Removal of two (2) units. No change in source PTE.									
Central Teaming Comp	AA 089-27079-00172	10/30/2008	--	--	--	--	--	--	--
5(c) Replacement of sludge unit (screener & diesel engine)									
Central Teaming Comp	AA 089-24555-00172	6/7/2007	1.05	1.05	1.05	0.63	9.5	0.77	2.05
5(d) Addition of screening unit. No change to source PTE									
Central Teaming Comp	AA 089-23657-00172	10/13/2006	--	--	--	--	--	--	--
5(e) Initial Part 70 Operating permit									
Central Teaming Comp	TV 089-7684-00172	06.30/2006	--	--	--	--	--	--	--
6(a) Change in equipment, limits required such that no change in source PTE occurred									
Mid-Cont. Coal & Coke	SPM 089-25334-00173	9/2/2008	--	--	--	--	--	--	--
6(b) Addition of a stacking conveyor. No change in source PTE occurred									
Mid-Cont. Coal & Coke	MPM 089-24352-00173	7/19/2007	--	--	--	--	--	--	--
6(c) Initial Part 70 Operating permit									
Mid-Cont. Coal & Coke	TV 089-8064-00173	6/30/2006	--	--	--	--	--	--	--
7(a) Appeal Resolution - Name change, descriptive changes to facilities, and revisions to compliance monitoring									
Tube City, Inc	SPM 089-23674-00174	4/19/2010	--	--	--	--	--	--	--
7(b) Initial Part 70 Operating permit									
Tube City, Inc	TV 089-7648-00174	8/17/2006	--	--	--	--	--	--	--
8(a) Addition of tanks. No change in limited throughput. No change to source PTE.									
AKJ Industries, Inc	AA 089-27452-00505	2/23/2009	--	--	--	--	--	--	--
8(b) Part 70 Operating permit									
AKJ Industries, Inc	TV 089-22772-00505	5/24/2007	--	--	--	--	--	1.2	--
9(a) Aggregated with TV emissions. No change in source PTE									
J.L. Smith Services	SPM 089-28415-00509	12/10/2009	--	--	--	--	--	--	--
9(b) Part 70 Operating permit									
J.L. Smith Services	TV 089-23525-00509	12/15/2006	22.9	11.3	11.3	1.56	23.8	1.96	5.12
10(a) Revocation									
U.S. Aggregates, Inc.	089-29019-05256	3/9/2010	--	--	--	--	--	--	--
10(b) Updating Local County Agency descriptive information									
U.S. Aggregates, Inc.	AA 089-27839-05256	5/4/2009	--	--	--	--	--	--	--
11(c) Initial Part 70 Operating Permit									
U.S. Aggregates, Inc.	TV 089-21828-05256	11/14/2006	--	--	--	--	--	--	--
12(a) Part 70 Operating permit - Determination that Brandenburg is no longer one source with USS Gary									
Brandenburg	TV 089-25094-00176	1/6/2008							
12(b) Increase in VOC emissions from paint booth									
Brandenburg	SPM 089-23501-00176	1/8/2007	--	--	--	--	--	2	--
12(c) Initial Part 70 Operating permit									
Brandenburg	TV 089-19781-00176	3/1/2005	--	--	--	--	--	2.5	--
13(a) Relocation to USS Gary									
Heritage Slag	089-25938-05250	2/4/2008	10.1	4.92	4.92	--	--	--	--
13(b) Name Change									
Heritage Slag	089-27990-05250	6/12/2009	--	--	--	--	--	--	--
13(c) Revocation									
Heritage Slag	089-29018-05250	3/11/2010	--	--	--	--	--	--	--
		Totals	92.59	47.49	46.08	11.31	70.41	30.874	113.65

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Significant Source Modification and Significant Permit Modification

Source Description and Location

Source Name:	U.S. Steel - Gary Works
Source Address:	1 North Broadway, Gary, Indiana 46402
Mailing Address:	1 North Broadway, Gary, Indiana 46402
County:	Lake
SIC Code:	3312
Operation Permit No.:	T089-7663-00121
Operation Permit Issuance Date:	August 18, 2006
Significant Source Modification No.:	089-28848-00121
Significant Permit Modification No.:	089-29236-00121
Permit Reviewer:	Jenny Acker

Source Definition

This integrated steel mill consists of a main mill and twelve (12) on-site contractors:

(a) U. S. Steel - Gary Works, plant ID 089-00121, the primary operation, located at One North Broadway, Gary, Indiana 46402;

(b) International Mill Service, Inc. plant ID 089-00132, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;

(c) South Shore Slag LLC, plant ID 089-00133, the on-site contractor, located at One North Buchanan Street, Gary, Indiana 46402;

(d) Heckett Multiserv, plant ID 089-00170, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;

(e) Oil Technology, Inc., plant ID 089-00171, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;

(f) Central Teaming Company, plant ID 089-00172, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;

(g) Mid-Continent Coal and Coke Company, plant ID 089-00173, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;

(h) Tube City, Inc., plant ID 089-00174, the on-site contractor located at One North Broadway, Gary, Indiana 46401;

(i) AKJ Industries, Inc., plant ID 089- 00505, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;

(j) J.L. Smith Services DBA American Crushing & Recycling, plant ID 089- 00509, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;

(k) U.S. Aggregates, Inc., plant ID 089- 05256, the on-site contractor, located at One North Broadway, Gary, Indiana 46402;

(l) Critser Companies, plant ID 089- 05333, the on-site contractor, located at One North Broadway, Gary, Indiana 46402.

IDEM has determined that U.S. Steel - Gary Works and the on-site contractors are under the common control of U.S. Steel - Gary Works, and therefore, will be considered one (1) source, as defined by 326 IAC 2-7-1(22), based on this contractual control. Therefore, the term "source" in the Part 70 documents refers to both U.S. Steel - Gary Works and the on-site contractors.

Separate Part 70 permits will be issued to U.S. Steel - Gary Works and each on-site contractor, solely for administrative purposes.

Company Name	Part 70 Permit Number
U.S. Steel - Gary Works	089-7663-00121
Central Teaming Company, Inc.	089-7684-00172
Heckett Multiserv,	089-7649-00170
International Mill Service, Inc.	089-5630-00132
AKJ Industries, Inc.	089-22772-00505
South Shore Slag LLC	089-26455-00133
Mid-Continent Coal and Coke Company	089-8064-00173
Tube City, Inc.	089-7648-00174
U.S. Aggregates, Inc.	089-21828-05256
J.L. Smith Services DBA American Crushing & Recycling	089-23525-00509
Oil Technology, Inc.	089-24654-00171
Critser Companies	089-28097-05333

Existing Approvals

The source was issued Part 70 Operating Permit No. 089-7663-00121 on August 18, 2006. The source has since received the following approvals:

(a) Significant Permit Modification No.: 089-23680-00121, issued on October 22, 2007;

(b) Administrative Amendment No.: 089-25923-00121, issued on February 25, 2008;

(c) Administrative Amendment No.: 089-26246-00121, issued on April 24, 2008;

(d) Administrative Amendment No.: 089-27151-00121, issued on January 12, 2009;

(e) Significant Permit Modification No.: 089-26519-00121, issued on February 17, 2009; and

(f) Significant Permit Modification No.: 089-27690-00121, issued on October 05, 2010.

County Attainment Status

The source is located in Lake County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Attainment effective February 18, 2000, for the part of the city of East Chicago bounded by Columbus Drive on the north; the Indiana Harbor Canal on the west; 148th Street, if extended, on the south; and Euclid Avenue on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of East Chicago and Lake County.
O_3	Nonattainment Subpart 2 Moderate effective June 15, 2004, for the 8-hour ozone standard.[1]
PM_{10}	Attainment effective March 11, 2003, for the cities of East Chicago, Hammond, Whiting, and Gary. Unclassifiable effective November 15, 1990, for the remainder of Lake County.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.
[1]Nonattainment Severe 17 effective November 15, 1990, for the Chicago-Gary-Lake County area for the 1-hour ozone standard which was revoked effective June 15, 2005. Basic nonattainment designation effective federally April 5, 2005, for PM2.5.	

Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone.

(a) Ozone Standards

(1) 1-hour ozone standard
On December 22, 2006 the United States Court of Appeals, District of Columbia issued a decision which served to partially vacate and remand the U.S. EPA's final rule for implementation of the eight-hour National Ambient Air quality Standard for ozone. *South Coast Air Quality Mgmt. Dist. v. EPA*, 472 F.3d 882 (D.C. Cir., December 22, 2006), *rehearing denied* 2007 U.S. App. LEXIS 13748 (D.C. Cir., June 8, 2007). The U.S. EPA has instructed IDEM to issue permits in accordance with its interpretation of the *South Coast* decision as follows: Gary-Lake-Porter County was previously designated as a severe non-attainment area prior to revocation of the one-hour ozone standard, therefore, pursuant to the anti-backsliding provisions of the Clean Air Act, any new or existing source must be subject to the major source applicability cut-offs and offset ratios under the area's previous one-hour standard designation. This means that a source must achieve the Lowest Achievable Emission Rate (LAER) if it exceeds twenty-five (25) tons per year of VOC emissions and must offset any increase in VOC emissions by a decrease of 1.3 times that amount.

On January 26, 1996, in 40 CFR 52.777(i), the U.S. EPA granted a waiver of the requirements of Section 182(f) of the CAA for Lake and Porter Counties, including the lower NO_x threshold for nonattainment new source review. Therefore, VOC emissions alone are considered when evaluating the rule applicability relating to the 1-hour ozone standards. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability - Entire Source section.

(2) 8-hour ozone standard
VOC and NO_x emissions are considered when evaluating the rule applicability relating to the 8-hour ozone standard. Lake County has been designated as

nonattainment for the 8-hour ozone standard. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability – Entire Source section.

(b) PM2.5
U.S. EPA, in the Federal Register Notice 70 FR 943, dated January 5, 2005, has designated Lake County as nonattainment for PM2.5. On March 7, 2005, the Indiana Attorney General's Office, on behalf of IDEM, filed a lawsuit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's New Source Review Rule for PM2.5 promulgated on May 8, 2008, and effective on July 15, 2008. Therefore, it is necessary to review direct PM2.5 and SO2 emissions pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5, and direct PM2.5 emissions pursuant to the requirements of the Title V program (326 IAC 2-7).

(c) Other Criteria Pollutants
Lake County has been classified as attainment or unclassifiable for PM_{10}, SO_2, NO_2, CO, and lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this source is classified as an iron and steel mill (326 IAC 2-7-1(22)(B)(v)) it is considered one (1) of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7. Therefore, fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Source Status

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	**Emissions** (ton/yr)
PM	Greater Than 100
PM_{10}	Greater Than 100
$PM_{2.5}$	Greater Than 100
SO_2	Greater Than 100
VOC	Greater Than 100
CO	Greater Than 100
NO_X	Greater Than 100

(a) This existing source is a major stationary source under PSD (326 IAC 2-2), because a regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one (1) of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).

(b) This existing source is a major stationary source under Emission Offset (326 IAC 2-3), because Volatile Organic Compounds (VOC), a nonattainment regulated pollutant, is emitted at a rate of 100 tons per year or more.

(c) This existing source is a major stationary source, under nonattainment new source review rules (326 IAC 2-1.1-5) since direct PM2.5 and SO_2 are emitted at a rate of 100 tons per year or more.

The table below summarizes the potential to emit HAPs for the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

HAPs	**Potential To Emit** (ton/yr)
Single HAP	Greater Than 10
Total HAPs	Greater Than 25

(d) This existing source is a major source of HAPs, as defined in 40 CFR 63.2, because HAP emissions are greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

(e) These emissions are based upon the Technical Support Document (TSD) to Part 70 Operating Permit No. 089-7663-00121, issued on August 18, 2006.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2006 OAQ emission data.

Pollutant	**Actual Emissions** (ton/yr)
PM	Not Reported
PM_{10}	1,495
$PM_{2.5}$	1,316
SO_2	4,817
VOC	1,232
CO	85,574
NO_X	4,224
HAP (Ammonia)	101
Total HAPs	Not Reported

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by U.S. Steel - Gary Works on January 4, 2010, relating to the construction and operation of four (4) Carbon Alloy Synthesis Plant (CASP) modules and associated material handling equipment. The following is a list of the proposed emission units and pollution control devices:

<u>Carbon Alloy Synthesis Plant (CASP) A</u>

(a) Raw Material Receiving Handling and Silos A, identified as RMRHSA, approved for construction in 2010, consisting of the following:

(1) One (1) CDA1 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) baghouse (OR-A-01-DC1105), exhausting to stack OR-A-01-ST1105.

(2) One (1) CDA2 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) dust collector (OR-A-01-DC2105), exhausting to stack OR-A-01-ST2105.

(3) Five (5) dry coal storage silos, each with a storage capacity of 240 tons of dried coal, ducted to dedicated baghouses (OR-A-02-DC1070, OR-A-02-DC2070, OR-A-02-DC3070, OR-A-02-DC4070, and OR-A-02-DC5070, respectively), exhausting to stacks OR-A-02-ST1070, OR-A-02-ST2070, OR-A-02-ST3070, OR-A-02-ST4070, and OR-A-02-ST5070, respectively.

(4) Five (5) blend #1 weigh feeders, each with a rated capacity of 40 tons per hour, and one (1) drag conveyor, with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-A-03-DC1105), exhausting to stack OR-A-03-ST1105.

(5) Four (4) blend #1 feed hoppers, with a rated capacity of 30 tons per hour, and two (2) blend #1 hopper feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-A-04-DC1105), exhausting to stack OR-A-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSA facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDA1, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER A1 and FER A2 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-A-01-CY-1305) and one (1) dust collector (OR-A-01-DC1205), in series, exhausting to stack OR-A-01-ST1215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCA1, approved for construction in 2010, with a maximum capacity of 100 tons per hour, ducted to one (1) dust collector (OR-A-02-DC1105), exhausting to stack OR-A-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDA2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER A3 and FER A4 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-A-01-CY-2305) and one (1) dust collector (OR-A-01-DC2205), in series, exhausting to stack OR-A-01-ST2215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCA2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, ducted to one (1) dust collector (OR-A-02-DC2105), exhausting to stack OR-A-02-

ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERA1, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB A1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR1015), one (1) cyclone (OR-A-09-CY-1025), and one (1) baghouse (OR-A-09-DC1030), in series, exhausting to stack OR-A-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERA2, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB A2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR2015), one (1) cyclone (OR-A-09-CY-2025), and one (1) baghouse (OR-A-09-DC2030), in series, exhausting to stack OR-A-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERA3, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB A3, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR3015), one (1) cyclone (OR-A-09-CY-3025), and one (1) baghouse (OR-A-09-DC3030), in series, exhausting to stack OR-A-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERA4, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB A4, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR4015), one (1) cyclone (OR-A-09-CY-4025), and one (1) baghouse (OR-A-09-DC4030), in series, exhausting to stack OR-A-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM A1 - RCLM A4, approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FER A1 - FER A4, consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 ^{0}F - 800 ^{0}F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB A1 - FERAB A4, respectively.

(2) Four (4) coal tar surge tanks, one (1) per FER.

(k) One (1) Carborec Storage and Blending Area A, identified as CBSBA, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to a baghouse (OR-A-05-DC1205), exhausting to stack OR-A-05-ST1205.

(2) Six (6) weigh feeders, each with a rated capacity of 40 tons per hour, and blend #2 drag conveyors, each with a rated capacity of 75 tons per hour, ducted to a baghouse (OR-A-05-DC1405), exhausting to stack OR-A-05-ST1405.

(3) One (1) Carborec storage silo, with a storage capacity of 240 tons, ducted to a baghouse (OR-A-05-DC6070), exhausting to stack OR-A-05-ST6070.

(4) One (1) blend #2 surge bin, with a storage capacity of 440 tons, ducted to a baghouse (OR-A-06-DC1405), exhausting to stack OR-A-06-ST1405.

(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, each with a rated capacity of 30 tons per hour, billet belt conveyors and one (1) billet roller screener, each with a rated capacity of 80 tons per hour, and one (1) billet fines weigh feeder, with a rated capacity of 10 tons per hour, ducted to a baghouse (OR-A-06-DC1205), exhausting to stack OR-A-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

(l) One (1) billet transfer area, approved for construction in 2010, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-A-06-HP1125, with a maximum rated capacity of 10 tons per hour.

(2) Three (3) billet fines open belt conveyors, identified as OR-A-06-CB1130, OR-A-06-CB1140, and OR-A-06-CB1145, each with a maximum rated capacity of 10 tons per hour.

(3) One (1) billet belt conveyor, identified as OR-A-06-CB1110, with a maximum rated capacity of 60 tons per hour.

(4) One (1) billet hopper, identified as OR-A-06-HP1115, with a maximum storage capacity of 3 tons.

(5) Four (4) billet belt conveyors, identified as OR-A-06-CB1120, OR-A-06-CB2120, OR-A-06-CB1126, and OR-A-06-CB2126, each with a maximum rated capacity of 60 tons per hour.

(6) Two (2) billet vibratory feeders, identified as OR-A-06-VF1125 and OR-A-06-VF2125, each with a rated maximum capacity of 30 tons per hour.

(7) Two (2) trolley car loading stations, collectively identified as OR-A-06-LD1128, each with maximum capacity of 30 tons per hour.

(8) One (1) billet hopper, identified as OR-A-06-HP1135, and five (5) belt conveyors, identified as OR-A-06-CB1150, OR-A-06-CB1160, OR-A-06-CB1170, OR-A-06-CB1180, and OR-A-06-CB1190, each with a rated capacity of 30 tons per hour.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRA1, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB A1, equipped with natural gas-fired burners with a combined maximum heat input

capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-A-10-SR1010), one (1) cyclone (OR-A-10-CY-1115), and one (1) baghouse (OR-A-10-DC1020), in series, exhausting to stack OR-A-10-ST1025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRA2, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB A2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-A-10-SR2010), one (1) cyclone (OR-A-10-CY-2115), and one (1) baghouse (OR-A-10-DC2020), in series, exhausting to stack OR-A-10-ST2025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(o) One (1) Finish Product Handling and Loading process, approved for construction in 2010, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-A-08-CB1020, OR-A-08-CB1030, OR-A-08-CB2020, and OR-A-08-CB2030, each with a maximum rated capacity of 20 tons per hour.

(2) One (1) Cokonyx belt conveyor, identified as OR-A-08-CD1035, with a maximum rated capacity of 40 tons per hour.

(p) One (1) lime storage silo, identified as LSA, approved for construction in 2010, with a storage capacity of 50 tons of lime, equipped with one (1) dust collector (OR-A-12-DC1006), exhausting to stack OR-A-12-ST1006.

(q) Two (2) diesel-fired emergency generators, identified as EGA1 and EGA2, approved for construction in 2010, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(r) One (1) natural gas-fired emergency generator, identified as EGA3, approved for construction in 2010, with a maximum rated output of 450 kW. Under 40 CFR 60, Subpart IIII, this is considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

<u>Carbon Alloy Synthesis Plant (CASP) Module B</u>

(a) Raw Material Receiving Handling and Silos B, identified as RMRHSB, approved for construction in 2010, consisting of the following:

(1) One (1) CDB1 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) baghouse (OR-B-01-DC1105), exhausting to stack OR-B-01-ST1105.

(2) One (1) CDB2 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) dust collector (OR-B-01-DC2105), exhausting to stack OR-B-01-ST2105.

(3) Five (5) dry coal storage silos, each with a storage capacity of 240 tons of dried coal, ducted to dedicated baghouses (OR-B-02-DC1070, OR-B-02-DC2070, OR-B-02-DC3070, OR-B-02-DC4070, and OR-B-02-DC5070, respectively), exhausting to stacks OR-B-02-ST1070, OR-B-02-ST2070, OR-B-02-ST3070, OR-B-02-ST4070, and OR-B-02-ST5070, respectively.

(4) Five (5) blend #1 weigh feeders, each with a rated capacity of 40 tons per hour, and one (1) drag conveyor, with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-B-03-DC1105), exhausting to stack OR-B-03-ST1105.

(5) Four (4) blend #1 feed hoppers, with a rated capacity of 30 tons per hour, and two (2) blend #1 hopper feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-B-04-DC1105), exhausting to stack OR-B-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSB facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDB1, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER B1 and FER B2 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-B-01-CY-1305) and one (1) dust collector (OR-B-01-DC1205), in series, exhausting to stack OR-B-01-ST1215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCB1, approved for construction in 2010, with a maximum capacity of 100 tons per hour, ducted to one (1) dust collector (OR-B-02-DC1105), exhausting to stack OR-B-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDB2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER B3 and FER B4 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-B-01-CY-2305) and one (1) dust collector (OR-B-01-DC2205), in series, exhausting to stack OR-B-01-ST2215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCB2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, ducted to one (1) dust collector (OR-B-02-DC2105), exhausting to stack OR-B-02-ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB1, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB B1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-B-09-SR1015), one (1) cyclone (ORB-09-CY-1025), and one (1) baghouse (OR-B-09-DC1030), in series, exhausting to stack OR-B-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB2, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB B2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-B-09-SR2015), one (1) cyclone (OR-B09-CY-2025), and one (1) baghouse (OR-B-09-DC2030), in series, exhausting to stack OR-B-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB3, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB B3, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-B-09-SR3015), one (1) cyclone (OR-B-09-CY-3025), and one (1) baghouse (OR-B-09-DC3030), in series, exhausting to stack OR-B-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB4, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB B4, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-B-09-SR4015), one (1) cyclone (OR-B-09-CY-4025), and one (1) baghouse (OR-B-09-DC4030), in series, exhausting to stack OR-B-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM B1 - RCLM B4, approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FER B1 - FER B4, consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 ^{0}F - 800 ^{0}F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB B1 - FERAB B4, respectively.

(2) Four (4) coal tar surge tanks, one (1) per FER.

(k) One (1) Carborec Storage and Blending Area B, identified as CBSBB, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to a baghouse (OR-B-05-DC1205), exhausting to stack OR-B-05-ST1205.

(2) Six (6) weigh feeders, each with a rated capacity of 40 tons per hour, and blend #2 drag conveyors, each with a rated capacity of 75 tons per hour, ducted to a baghouse (OR-B-05-DC1405), exhausting to stack OR-B-05-ST1405.

(3) One (1) Carborec storage silo, with a storage capacity of 240 tons, ducted to a baghouse (OR-B-05-DC6070), exhausting to stack OR-B-05-ST6070.

(4) One (1) blend #2 surge bin, with a storage capacity of 440 tons, ducted to a baghouse (OR-B-06-DC1405), exhausting to stack OR-B-06-ST1405.

(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, each with a rated capacity of 30 tons per hour, billet belt conveyors and one (1) billet roller screener, each with a rated capacity of 80 tons per hour, and one (1) billet fines weigh feeder, with a rated capacity of 10 tons per hour, ducted to a baghouse (OR-B-06-DC1205), exhausting to stack OR-B-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

(l) One (1) billet transfer area, approved for construction in 2010, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-B-06-HP1125, with a maximum rated capacity of 10 tons per hour.

(2) Three (3) billet fines open belt conveyors, identified as OR-B-06-CB1130, OR-B-06-CB1140, and OR-B-06-CB1145, each with a maximum rated capacity of 10 tons per hour.

(3) One (1) billet belt conveyor, identified as OR-B-06-CB1110, with a maximum rated capacity of 60 tons per hour.

(4) One (1) billet hopper, identified as OR-B-06-HP1115, with a maximum storage capacity of 3 tons.

(5) Four (4) billet belt conveyors, identified as OR-B-06-CB1120, OR-B-06-CB2120, OR-B-06-CB1126, and OR-B-06-CB2126, each with a maximum rated capacity of 60 tons per hour.

(6) Two (2) billet vibratory feeders, identified as OR-B-06-VF1125 and OR-B-06-VF2125, each with a rated maximum capacity of 30 tons per hour.

(7) Two (2) trolley car loading stations, collectively identified as OR-B-06-LD1128, each with maximum capacity of 30 tons per hour.

(8) One (1) billet hopper, identified as OR-B-06-HP1135, and five (5) belt conveyors, identified as OR-B-06-CB1150, OR-B-06-CB1160, OR-B-06-CB1170, OR-B-06-CB1180, and OR-B-06-CB1190, each with a rated capacity of 30 tons per hour.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRB1, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB B1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-B-10-SR1010), one (1) cyclone (OR-B-10-CY-1115), and one (1) baghouse (OR-B-10-DC1020), in series, exhausting to stack OR-B-10-ST1025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRB2, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB B2, equipped with natural gas-fired burners with a combined maximum heat input

capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-B-10-SR2010), one (1) cyclone (OR-B-10-CY-2115), and one (1) baghouse (OR-B-10-DC2020), in series, exhausting to stack OR-B-10-ST2025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(o) One (1) Finish Product Handling and Loading process, approved for construction in 2010, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-B-08-CB1020, OR-B-08-CB1030, OR-B-08-CB2020, and OR-B-08-CB2030, each with a maximum rated capacity of 20 tons per hour.

(2) One (1) Cokonyx belt conveyor, identified as OR-B-08-CD1035, with a maximum rated capacity of 40 tons per hour.

(p) One (1) lime storage silo, identified as LSB, approved for construction in 2010, with a storage capacity of 50 tons of lime, equipped with one (1) dust collector (OR-B-12-DC1006), exhausting to stack OR-B-12-ST1006.

(q) Two (2) diesel-fired emergency generators, identified as EGB1 and EGB2, approved for construction in 2010, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(r) One (1) natural gas-fired emergency generator, identified as EGB3, approved for construction in 2010, with a maximum rated output of 450 kW. Under 40 CFR 60, Subpart IIII, this is considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

<u>Carbon Alloy Synthesis Plant (CASP) Module C</u>

(a) Raw Material Receiving Handling and Silos C, identified as RMRHSC, approved for construction in 2010, consisting of the following:

(1) One (1) CDC1 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) baghouse (OR-C-01-DC1105), exhausting to stack OR-C-01-ST1105.

(2) One (1) CDC2 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) dust collector (OR-C-01-DC2105), exhausting to stack OR-C-01-ST2105.

(3) Five (5) dry coal storage silos, each with a storage capacity of 240 tons of dried coal, ducted to dedicated baghouses (OR-C-02-DC1070, OR-C-02-DC2070, OR-C-02-DC3070, OR-C-02-DC4070, and OR-C-02-DC5070, respectively), exhausting to stacks OR-C-02-ST1070, OR-C-02-ST2070, OR-C-02-ST3070, OR-C-02-ST4070, and OR-C-02-ST5070, respectively.

(4) Five (5) blend #1 weigh feeders, each with a rated capacity of 40 tons per hour, and one (1) drag conveyor, with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-C-03-DC1105), exhausting to stack OR-C-03-ST1105.

(5) Four (4) blend #1 feed hoppers, with a rated capacity of 30 tons per hour, and two (2) blend #1 hopper feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-C-04-DC1105), exhausting to stack OR-C-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSC facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDC1, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER C1 and FER C2 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-C-01-CY-1305) and one (1) dust collector (OR-C-01-DC1205), in series, exhausting to stack OR-C-01-ST1215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCC1, approved for construction in 2010, with a maximum capacity of 100 tons per hour, ducted to one (1) dust collector (OR-C-02-DC1105), exhausting to stack OR-C-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDC2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER C3 and FER C4 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-C-01-CY-2305) and one (1) dust collector (OR-C-01-DC2205), in series, exhausting to stack OR-C-01-ST2215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCC2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, ducted to one (1) dust collector (OR-C-02-DC2105), exhausting to stack OR-C-02-ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC1, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB C1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-C-09-SR1015), one (1) cyclone (OR-C-09-CY-1025), and one (1) baghouse (OR-C-09-DC1030), in series, exhausting to stack OR-C-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC2, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB C2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-C-09-SR2015), one (1) cyclone (OR-C-09-CY-2025), and one (1) baghouse (OR-C-09-DC2030), in series, exhausting to stack OR-C-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC3, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour,

equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB C3, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-C-09-SR3015), one (1) cyclone (OR-C -09-CY-3025), and one (1) baghouse (OR-C-09-DC3030), in series, exhausting to stack OR-C-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC4, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB C4, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-C-09-SR4015), one (1) cyclone (OR-C-09-CY-4025), and one (1) baghouse (OR-C-09-DC4030), in series, exhausting to stack OR-C-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM C1 - RCLM C4, approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FER C1 - FER C4, consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 ^{0}F - 800 ^{0}F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB C1 - FERAB C4, respectively.

(2) Four (4) coal tar surge tanks, one (1) per FER.

(k) One (1) Carborec Storage and Blending Area C, identified as CBSBC, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to a baghouse (OR-C-05-DC1205), exhausting to stack OR-C-05-ST1205.

(2) Six (6) weigh feeders, each with a rated capacity of 40 tons per hour, and blend #2 drag conveyors, each with a rated capacity of 75 tons per hour, ducted to a baghouse (OR-C-05-DC1405), exhausting to stack OR-C-05-ST1405.

(3) One (1) Carborec storage silo, with a storage capacity of 240 tons, ducted to a baghouse (OR-C-05-DC6070), exhausting to stack OR-C-05-ST6070.

(4) One (1) blend #2 surge bin, with a storage capacity of 440 tons, ducted to a baghouse (OR-C-06-DC1405), exhausting to stack OR-C-06-ST1405.

(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, each with a rated capacity of 30 tons per hour, billet belt conveyors and one (1) billet roller screener, each with a rated capacity of 80 tons per hour, and one (1) billet fines weigh feeder, with a rated capacity of 10 tons per hour, ducted to a baghouse (OR-C-06-DC1205), exhausting to stack OR-C-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

(l) One (1) billet transfer area, approved for construction in 2010, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-C-06-HP1125, with a maximum rated capacity of 10 tons per hour.

(2) Three (3) billet fines open belt conveyors, identified as OR-C-06-CB1130, OR-C-06-CB1140, and OR-C-06-CB1145, each with a maximum rated capacity of 10 tons per hour.

(3) One (1) billet belt conveyor, identified as OR-C-06-CB1110, with a maximum rated capacity of 60 tons per hour.

(4) One (1) billet hopper, identified as OR-C-06-HP1115, with a maximum storage capacity of 3 tons.

(5) Four (4) billet belt conveyors, identified as OR-C-06-CB1120, OR-C-06-CB2120, OR-C-06-CB1126, and OR-C-06-CB2126, each with a maximum rated capacity of 60 tons per hour.

(6) Two (2) billet vibratory feeders, identified as OR-C-06-VF1125 and OR-C-06-VF2125, each with a rated maximum capacity of 30 tons per hour.

(7) Two (2) trolley car loading stations, collectively identified as OR-C-06-LD1128, each with maximum capacity of 30 tons per hour.

(8) One (1) billet hopper, identified as OR-C-06-HP1135, and five (5) belt conveyors, identified as OR-C-06-CB1150, OR-C-06-CB1160, OR-C-06-CB1170, OR-C-06-CB1180, and OR-C-06-CB1190, each with a rated capacity of 30 tons per hour.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRC1, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB C1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-C-10-SR1010), one (1) cyclone (OR-C-10-CY-1115), and one (1) baghouse (OR-C-10-DC1020), in series, exhausting to stack OR-C-10-ST1025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRC2, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB C2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-C-10-SR2010), one (1) cyclone (OR-C-10-CY-2115), and one (1) baghouse (OR-C-10-DC2020), in series, exhausting to stack OR-C-10-ST2025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(o) One (1) Finish Product Handling and Loading process, approved for construction in 2010, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-C-08-CB1020, OR-C-08-CB1030, OR-C-08-CB2020, and OR-C-08-CB2030, each with a maximum rated capacity of 20 tons per hour.

(2) One (1) Cokonyx belt conveyor, identified as OR-C-08-CD1035, with a maximum rated capacity of 40 tons per hour.

(p) One (1) lime storage silo, identified as LSC, approved for construction in 2010, with a storage capacity of 50 tons of lime, equipped with one (1) dust collector (OR-C-12-DC1006), exhausting to stack OR-C-12-ST1006.

(q) Two (2) diesel-fired emergency generators, identified as EGC1 and EGC2, approved for construction in 2010, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(r) One (1) natural gas-fired emergency generator, identified as EGC3, approved for construction in 2010, with a maximum rated output of 450 kW. Under 40 CFR 60, Subpart IIII, this is considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

<u>Carbon Alloy Synthesis Plant (CASP) Module D</u>

(a) Raw Material Receiving Handling and Silos D, identified as RMRHSD, approved for construction in 2010, consisting of the following:

(1) One (1) CDD1 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) baghouse (OR-D-01-DC1105), exhausting to stack OR-D-01-ST1105.

(2) One (1) CDD2 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) dust collector (OR-D-01-DC2105), exhausting to stack OR-D-01-ST2105.

(3) Five (5) dry coal storage silos, each with a storage capacity of 240 tons of dried coal, ducted to dedicated baghouses (OR-D-02-DC1070, OR-D-02-DC2070, OR-D-02-DC3070, OR-D-02-DC4070, and OR-D-02-DC5070, respectively), exhausting to stacks OR-D-02-ST1070, OR-D-02-ST2070, OR-D-02-ST3070, OR-D-02-ST4070, and OR-D-02-ST5070, respectively.

(4) Five (5) blend #1 weigh feeders, each with a rated capacity of 40 tons per hour, and one (1) drag conveyor, with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-D-03-DC1105), exhausting to stack OR-D-03-ST1105.

(5) Four (4) blend #1 feed hoppers, with a rated capacity of 30 tons per hour, and two (2) blend #1 hopper feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-D-04-DC1105), exhausting to stack OR-D-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSD facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDD1, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER D1 and FER D2 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-D-01-CY-1305) and one (1) dust collector (OR-D-01-DC1205), in

series, exhausting to stack OR-D-01-ST1215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCD1, approved for construction in 2010, with a maximum capacity of 100 tons per hour, ducted to one (1) dust collector (OR-D-02-DC1105), exhausting to stack OR-D-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDD2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER D3 and FER D4 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-D-01-CY-2305) and one (1) dust collector (OR-D-01-DC2205), in series, exhausting to stack OR-D-01-ST2215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCD2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, ducted to one (1) dust collector (OR-D-02-DC2105), exhausting to stack OR-D-02-ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD1, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB D1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-D-09-SR1015), one (1) cyclone (OR-D-09-CY-1025), and one (1) baghouse (OR-D-09-DC1030), in series, exhausting to stack OR-D-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD2, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB D2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-D-09-SR2015), one (1) cyclone (OR-D -09-CY-2025), and one (1) baghouse (OR-D-09-DC2030), in series, exhausting to stack OR-D-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD3, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB D3, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-D-09-SR3015), one (1) cyclone (OR-D-09-CY-3025), and one (1) baghouse (OR-D-09-DC3030), in series, exhausting to stack OR-D-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD4, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB D4, equipped with natural gas-fired burners with a combined maximum heat input capacity of

ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-D-09-SR4015), one (1) cyclone (OR-D-09-CY-4025), and one (1) baghouse (OR-D-09-DC4030), in series, exhausting to stack OR-D-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM D1- RCLM D4 approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FER D1 - FER D4 consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 ^{0}F - 800 ^{0}F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB D1 - FERAB D4 respectively.

(2) Four (4) coal tar surge tanks, one (1) per FER.

(k) One (1) Carborec Storage and Blending Area D, identified as CBSBD, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to a baghouse (OR-D-05-DC1205), exhausting to stack OR-D-05-ST1205.

(2) Six (6) weigh feeders, each with a rated capacity of 40 tons per hour, and blend #2 drag conveyors, each with a rated capacity of 75 tons per hour, ducted to a baghouse (OR-D-05-DC1405), exhausting to stack OR-D-05-ST1405.

(3) One (1) Carborec storage silo, with a storage capacity of 240 tons, ducted to a baghouse (OR-D-05-DC6070), exhausting to stack OR-D-05-ST6070.

(4) One (1) blend #2 surge bin, with a storage capacity of 440 tons, ducted to a baghouse (OR-D-06-DC1405), exhausting to stack OR-D-06-ST1405.

(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, each with a rated capacity of 30 tons per hour, billet belt conveyors and one (1) billet roller screener, each with a rated capacity of 80 tons per hour, and one (1) billet fines weigh feeder, with a rated capacity of 10 tons per hour, ducted to a baghouse (OR-D-06-DC1205), exhausting to stack OR-D-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

(l) One (1) billet transfer area, approved for construction in 2010, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-D-06-HP1125, with a maximum rated capacity of 10 tons per hour.

(2) Three (3) billet fines open belt conveyors, identified as OR-D-06-CB1130, OR-D-06-CB1140, and OR-D-06-CB1145, each with a maximum rated capacity of 10 tons per hour.

(3) One (1) billet belt conveyor, identified as OR-D-06-CB1110, with a maximum rated capacity of 60 tons per hour.

(4) One (1) billet hopper, identified as OR-D-06-HP1115, with a maximum storage capacity of 3 tons.

(5) Four (4) billet belt conveyors, identified as OR-D-06-CB1120, OR-D-06-CB2120, OR-D-06-CB1126, and OR-D-06-CB2126, each with a maximum rated capacity of 60 tons per hour.

(6) Two (2) billet vibratory feeders, identified as OR-D-06-VF1125 and OR-D-06-VF2125, each with a rated maximum capacity of 30 tons per hour.

(7) Two (2) trolley car loading stations, collectively identified as OR-D-06-LD1128, each with maximum capacity of 30 tons per hour.

(8) One (1) billet hopper, identified as OR-D-06-HP1135, and five (5) belt conveyors, identified as OR-D-06-CB1150, OR-D-06-CB1160, OR-D-06-CB1170, OR-D-06-CB1180, and OR-D-06-CB1190, each with a rated capacity of 30 tons per hour.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRD1, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB D1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-D-10-SR1010), one (1) cyclone (OR-D-10-CY-1115), and one (1) baghouse (OR-D-10-DC1020), in series, exhausting to stack OR-D-10-ST1025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRD2, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB D2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-D-10-SR2010), one (1) cyclone (OR-D-10-CY-2115), and one (1) baghouse (OR-D-10-DC2020), in series, exhausting to stack OR-D-10-ST2025.

(o) One (1) Finish Product Handling and Loading process, approved for construction in 2010, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-D-08-CB1020, OR-D-08-CB1030, OR-D-08-CB2020, and OR-D-08-CB2030, each with a maximum rated capacity of 20 tons per hour.

(2) One (1) Cokonyx belt conveyor, identified as OR-D-08-CD1035, with a maximum rated capacity of 40 tons per hour.

(p) One (1) lime storage silo, identified as LSD, approved for construction in 2010, with a storage capacity of 50 tons of lime, equipped with one (1) dust collector (OR-D-12-DC1006), exhausting to stack OR-D-12-ST1006.

(q) Two (2) diesel-fired emergency generators, identified as EGD1 and EGD2, approved for construction in 2010, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(r) One (1) natural gas-fired emergency generator, identified as EGD3, approved for construction in 2010, with a maximum rated output of 450 kW. Under 40 CFR 60, Subpart IIII, this is considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

CASP Coal Receiving and Handling

(a) Phase 1 CASP C and CASP D coal handling, approved for construction in 2010, consisting of the following:

(1) One (1) feed hopper and conveyor No.1 (PHS1-HC1), with a maximum rated capacity of 100 tons per hour, with emissions uncontrolled.

(2) Two (2) CASP C coal conveyors, identified as PHS1C-C1 and PHS1C-C2, each with a maximum rate of 100 tons per hour, with emissions uncontrolled.

(3) One (1) CASP C coal feed hopper No.2, identified as CASPC-FH2, with a maximum rate of 100 tons per hour, with hopper receiving emissions uncontrolled.

(4) Two (2) CASP D coal conveyors, identified as PHS1D-C1 and PHS1D-C2, each with a maximum rate of 100 tons per hour, with emissions uncontrolled.

(5) One (1) CASP D coal feed hopper No.2, identified as CASPD-FH2, with a maximum rate of 100 tons per hour, with hopper receiving emissions uncontrolled.

(b) Phase 2 CASP coal handling, approved for construction in 2010, consisting of the following:

(1) Two (2) CASP coal conveyors, identified as CASP-C1 and CASP-C2, each with a maximum rate of 100 tons per hour, with emissions uncontrolled.

(2) One (1) CASP rotary stacker CASP-RS1, with a maximum rate of 200 tons per hour, with emissions uncontrolled.

(3) Four (4) CASP coal conveyor feed hoppers No.1, identified as CASPA-FH1, CASPB-FH1, CASPC-FH1, and CASPD-FH1, each with a maximum rate of 100 tons per hour, with emissions uncontrolled.

(4) Two (2) CASP A coal conveyors, identified as CASPA-C1 and CASPA-C2, each with a maximum rated capacity of 100 tons per hour, with emissions uncontrolled.

(5) One (1) CASP A coal feed hopper No.2, identified as CASPA-FH2, with a maximum rate of 100 tons per hour, with hopper receiving emissions uncontrolled.

(6) Two (2) CASP B coal conveyors, identified as CASPB-C1 and CASPB-C2, each with a maximum rated capacity of 100 tons per hour, with emissions uncontrolled.

(7) One (1) CASP B coal feed hopper No.2, identified as CASPB-FH2, with a maximum rate of 100 tons per hour, with hopper receiving emissions uncontrolled.

(8) Two (2) CASP C coal conveyors, identified as CASPC-C1 and CASPC-C2, each with a maximum rated capacity of 100 tons per hour, with emissions uncontrolled.

(9) Two (2) CASP D coal conveyors, identified as CASPD-C1 and CASPD-C2, each with a maximum rated capacity of 100 tons per hour, with emissions uncontrolled.

Under 40 CFR 60, Subpart Y, the CASP Raw Material Receiving and Handling facilities are considered coal processing and conveying equipment, and coal storage systems.

(c) Storage Piles

(1) One (1) PHS1 intermediate coal storage pile No. 1, with a storage capacity of 0.25 acres.
(2) Four (4) PHS1 coal storage piles, with a combined storage capacity of 3.6 acres.
(3) One (1) PHS1 intermediate coal storage pile No. 2, with a storage capacity of 0.25 acres.
(4) Four (4) CASP coal storage piles, with a combined a storage capacity of 3.6 acres.

Under 40 CFR 60, Subpart Y, these storage piles are each considered open storage piles.

<u>CASP Cokonyx Loadout</u>

(a) Two (2) single deck vibratory screener feeders for CASP A, identified as CASPA-VF1 and CASPA-VF2, approved for construction in 2010, each with a maximum rated capacity of 20 tons per hour, with emissions uncontrolled.

(b) Two (2) single deck vibratory screener feeders for CASP B, identified as CASPB-VF1 and CASPB-VF2, approved for construction in 2010, each with a maximum rated capacity of 20 tons per hour, with emissions uncontrolled.

(c) Two (2) single deck vibratory screener feeders for CASP C, identified as CASPC-VF1 and CASPC-VF2, approved for construction in 2010, each with a maximum rated capacity of 20 tons per hour, with emissions uncontrolled.

(d) Two (2) single deck vibratory screener feeders for CASP D, identified as CASPD-VF1 and CASPD-VF2, approved for construction in 2010, each with a maximum rated capacity of 20 tons per hour, with emissions uncontrolled.

(e) Two (2) emergency product by-pass bunkers for CASP A, identified as CASPA-EB1 and CASPA-EB2, approved for construction in 2010, with emissions uncontrolled.

(f) Two (2) emergency product by-pass bunkers for CASP B, identified as CASPB-EB1 and CASPB-EB2, approved for construction in 2010, with emissions uncontrolled.

(g) Two (2) emergency product by-pass bunkers for CASP C, identified as CASPC-EB1 and CASPC-EB2, approved for construction in 2010, with emissions uncontrolled.

(h) Two (2) emergency product by-pass bunkers for CASP D, identified as CASPD-EB1 and CASPD-EB2, approved for construction in 2010, with emissions uncontrolled.

(i) Two (2) Cokonyx loadout conveyors for CASP A, identified as CKNXC-A1 and CKNXC-A2, approved for construction in 2010, each with a maximum capacity of 20 tons of Cokonyx per hour, with emissions uncontrolled.

(j) Two (2) Cokonyx loadout conveyors for CASP B, identified as CKNXC-B1 and CKNXC-B2, approved for construction in 2010, each with a maximum capacity of 20 tons of Cokonyx per hour, with emissions uncontrolled.

(k) Two (2) Cokonyx loadout conveyors for CASP C, identified as CKNXC-C1 and CKNXC-C2, approved for construction in 2010, each with a maximum capacity of 20 tons of Cokonyx per hour, with emissions uncontrolled.

(l) Two (2) Cokonyx loadout conveyors for CASP D, identified as CKNXC-D1 and CKNXC-D2, approved for construction in 2010, each with a maximum capacity of 20 tons of Cokonyx per hour, with emissions uncontrolled.

(m) One (1) C/D Cokonyx conveyor, identified as CKNXC-C/D, approved for construction in 2010, with a maximum capacity of 57 tons of Cokonyx per hour, with emissions uncontrolled.

(n) One (1) A/B Cokonyx conveyor, identified as CKNXC-A/B, approved for construction in 2010, with a maximum capacity of 57 tons of Cokonyx per hour, with emissions uncontrolled.

(o) Two (2) C/D Cokonyx surge bins, collectively identified as CKNXBin-C/D1, approved for construction in 2010, with a maximum capacity of 147 tons per bin, with emissions uncontrolled.

(p) Two (2) A/B Cokonyx surge bins, collectively identified as CKNXBin-A/B1, approved for construction in 2010, with a maximum storage capacity of 147 tons per silo, with emissions uncontrolled.

(q) Storage Piles

(1) CASP A/B Cokonyx Emergency Storage Pile, with a storage capacity of 0.02 acres.

(2) CASP C/D Cokonyx Emergency Storage Pile, with a storage capacity of 0.02 acres.

Insignificant Activities:

CASP Module A

(1) One (1) lubricating oil storage tank, identified as STO3 A, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 A, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT A1 and PFRCT A2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPA, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 60,

Subpart IIII, this is considered a fire pump stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

(5) One (1) coal tar storage tank, identified as STO1 A, approved for construction in 2010, with a storage capacity of 10,000 gallons.

CASP Module B

(1) One (1) lubricating oil storage tank, identified as STO3 B, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 B, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT B1 and PFRCT B2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPB, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 60, Subpart IIII, this is considered a fire pump stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

(5) Two (2) coal tar storage tanks, identified as STO1 B and STO2 B, approved for construction in 2010, each with a storage capacity of 10,000 gallons.

CASP Module C

(1) One (1) lubricating oil storage tank, identified as STO3 C, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 C, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT C and PFRCT C2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPC, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 60, Subpart IIII, this is considered a fire pump stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

(5) Two (2) coal tar storage tanks, identified as STO1 C and STO2 C, approved for construction in 2010, each with a storage capacity of 10,000 gallons.

CASP Module D

(1) One (1) lubricating oil storage tank, identified as STO3 D, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 D, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT D1 and PFRCT D2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPD, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 60, Subpart IIII, this is considered a fire pump stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

(5) One (1) coal tar storage tank, identified as STO1 D, approved for construction in 2010, with a storage capacity of 10,000 gallons.

"Integral Part of the Process" Determination

The Permittee has submitted the following information to justify why the afterburners associated with the Feed Enhancement Reactors (FERA1, FERA2, FERB1, FERB2, FERC1, FERC2, FERD1, and FERD2) should be considered an integral part of the Carborec production process that occurs in the Feed Enhancement Reactors:

(a) The Feed Enhancement Reactors (FER) are rotary kilns designed without burners. The heat from the FER afterburners is directed to an outer annular surrounding the rotary kiln and provides the heat for the coal to Carborec conversion. The FERs operate as a continuous process. Therefore, the FER afterburners are fired with natural gas during startup until process gases are available for combustion. The heat provided by the afterburner chamber is insufficient to reach an operating temperature of 800°F to 1,000 ^{O}F without the combustion of process gases. Therefore, without the afterburner the conversion of coal to Carborec would not occur.

IDEM, OAQ has evaluated the information submitted and agrees that the afterburners should be considered an integral part of the Feed Enhancement Reactors. Therefore, the permitting level will be determined using the potential to emit after the afterburners. Operating conditions in the proposed permit will specify that the afterburners shall operate at all times when the associated Feed Enhancement Reactor is in operation.

Enforcement Issues

There are no pending enforcement actions related to this modification.

Stack Summary

Stack ID	Operation (Unit ID)	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temp. (^{0}F)
CASP Module A					
OR-A-01-ST1105	wet coal (RMRHSA)	TBD	TBD	1,100	Amb.
OR-A-01-ST2105	wet coal (RMRHSA)	TBD	TBD	2,500	Amb.
OR-A-02-ST1070	dry coal bin (RMRHSA)	TBD	TBD	800	Amb.
OR-A-02-ST2070	dry coal bin (RMRHSA)	TBD	TBD	800	Amb.
OR-A-02-ST3070	dry coal bin (RMRHSA)	TBD	TBD	800	Amb.
OR-A-02-ST4070	dry coal bin (RMRHSA)	TBD	TBD	800	Amb.
OR-A-02-ST5070	dry coal bin (RMRHSA)	TBD	TBD	800	Amb.
OR-A-03-ST-1105	blend #1 weigh (RMRHSA)	TBD	TBD	2,500	Amb.
OR-A-04-ST1105	blend #1 feed (RMRHSA)	TBD	TBD	800	Amb.
OR-A-01-ST1215	coal dryer (CDA1)	TBD	TBD	30,000	Amb.
OR-A-01-ST2215	coal dryer (CDA2)	TBD	TBD	30,000	Amb.

Stack ID	Operation (Unit ID)	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temp. (^{0}F)
OR-A-02-ST1105	coal crusher (CCA1)	TBD	TBD	2,500	Amb.
OR-A-02-ST2105	coal crusher (CCA2)	TBD	TBD	2,500	Amb.
OR-A-05-ST1205	Carborec crusher (CBSBA)	TBD	TBD	2,500	Amb.
OR-A-05-ST1405	Carborec crusher (CBSBA)	TBD	TBD	9,600	Amb.
OR-A-05-ST6070	Carborec bin (CBSBA)	TBD	TBD	850	Amb.
OR-A-06-ST1405	blend #2 bin (CBSBA)	TBD	TBD	850	Amb.
OR-A-06-ST1205	green fines (CBSBA)	TBD	TBD	2,500	Amb.
OR-A-12-ST1006	lime bin (LSA)	TBD	TBD	850	Amb.
OR-A-09-ST1045	FERAB A1	65.6	2.5	8,000	305
OR-A-09-ST2045	FERAB A2	65.6	2.5	8,000	305
OR-A-09-ST3045	FERAB A3	65.6	2.5	8,000	305
OT-A-09-ST4045	FERAB A4	65.6	2.5	8,000	305
OR-A-10-ST1025	PFRAB A1	42.7	6	8,000	305
OR-A-10-ST2025	PFRAB A2	42.7	6	8,000	305
CASP Module B					
OR-B-01-ST1105	wet coal (RMRHSB)	TBD	TBD	1,100	Amb.
OR-B-01-ST2105	wet coal (RMRHSB)	TBD	TBD	2,500	Amb.
OR-B-02-ST1070	dry coal bin (RMRHSB)	TBD	TBD	800	Amb.
OR-B-02-ST2070	dry coal bin (RMRHSB)	TBD	TBD	800	Amb.
OR-B-02-ST3070	dry coal bin (RMRHSB)	TBD	TBD	800	Amb.
OR-B-02-ST4070	dry coal bin (RMRHSB)	TBD	TBD	800	Amb.
OR-B-02-ST5070	dry coal bin (RMRHSB)	TBD	TBD	800	Amb.
OR-B-03-ST-1105	blend #1 weigh (RMRHSB)	TBD	TBD	2,500	Amb.
OR-A-04-ST1105	blend #1 feed (RMRHSB)	TBD	TBD	800	Amb.
OR-B-01-ST1215	coal dryer (CDB1)	TBD	TBD	30,000	Amb.
OR-B-01-ST2215	coal dryer (CDB2)	TBD	TBD	30,000	Amb.
OR-B-02-ST1105	coal crusher (CCB1)	TBD	TBD	2,500	Amb.
OR-B-02-ST2105	coal crusher (CCB2)	TBD	TBD	2,500	Amb.
OR-B-05-ST1205	Carborec crusher (CBSBB)	TBD	TBD	2,500	Amb.
OR-B-05-ST1405	Carborec crusher (CBSBB)	TBD	TBD	9,600	Amb.
OR-B-05-ST6070	Carborec bin (CBSBB)	TBD	TBD	850	Amb.
OR-B-06-ST1405	blend #2 bin (CBSBB)	TBD	TBD	850	Amb.
OR-B-06-ST1205	green fines (CBSBB)	TBD	TBD	2,500	Amb.
OR-B-12-ST1006	lime bin (LSB)	TBD	TBD	850	Amb.
OR-B-09-ST1045	FERAB B1	65.6	2.5	8,000	305
OR-B-09-ST2045	FERAB B2	65.6	2.5	8,000	305
OR-B-09-ST3045	FERAB B3	65.6	2.5	8,000	305
OT-B-09-ST4045	FERAB B4	65.6	2.5	8,000	305
OR-B-10-ST1025	PFRAB B1	42.7	6	8,000	305
OR-B-10-ST2025	PFRAB B2	42.7	6	8,000	305
CASP Module C					
OR-C-01-ST1105	wet coal (RMRHSC)	TBD	TBD	1,100	Amb.
OR-C-01-ST2105	wet coal (RMRHSC)	TBD	TBD	2,500	Amb.
OR-C-02-ST1070	dry coal bin (RMRHSC)	TBD	TBD	800	Amb.
OR-C-02-ST2070	dry coal bin (RMRHSC)	TBD	TBD	800	Amb.
OR-C-02-ST3070	dry coal bin (RMRHSC)	TBD	TBD	800	Amb.

Stack ID	Operation (Unit ID)	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temp. (^{0}F)
OR-C-02-ST4070	dry coal bin (RMRHSC)	TBD	TBD	800	Amb.
OR-C-02-ST5070	dry coal bin (RMRHSC)	TBD	TBD	800	Amb.
OR-C-03-ST-1105	blend #1 weigh (RMRHSC)	TBD	TBD	2,500	Amb.
OR-C-04-ST1105	blend #1 feed (RMRHSC)	TBD	TBD	800	Amb.
OR-C-01-ST1215	coal dryer (CDC1)	TBD	TBD	30,000	Amb.
OR-C-01-ST2215	coal dryer (CDC2)	TBD	TBD	30,000	Amb.
OR-C-02-ST1105	coal crusher (CCC1)	TBD	TBD	2,500	Amb.
OR-C-02-ST2105	coal crusher (CCC2)	TBD	TBD	2,500	Amb.
OR-C-05-ST1205	Carborec crusher (CBSBC)	TBD	TBD	2,500	Amb.
OR-C-05-ST1405	Carborec crusher (CBSBC)	TBD	TBD	9,600	Amb.
OR-C-05-ST6070	Carborec bin (CBSBC)	TBD	TBD	850	Amb.
OR-C-06-ST1405	blend #2 bin (CBSBC)	TBD	TBD	850	Amb.
OR-C-06-ST1205	green fines (CBSBC)	TBD	TBD	2,500	Amb.
OR-C-12-ST1006	lime bin (LSC)	TBD	TBD	850	Amb.
OR-C-09-ST1045	FERAB C1	65.6	2.5	8,000	305
OR-C-09-ST2045	FERAB C2	65.6	2.5	8,000	305
OR-C-09-ST3045	FERAB C3	65.6	2.5	8,000	305
OT-C-09-ST4045	FERAB C4	65.6	2.5	8,000	305
OR-C-10-ST1025	PFRAB C1	42.7	6	8,000	305
OR-C-10-ST2025	PFRAB C2	42.7	6	8,000	305
CASP Module D					
OR-D-01-ST1105	wet coal (RMRHSD)	TBD	TBD	1,100	Amb.
OR-D-01-ST2105	wet coal (RMRHSD)	TBD	TBD	2,500	Amb.
OR-D-02-ST1070	dry coal bin (RMRHSD)	TBD	TBD	800	Amb.
OR-D-02-ST2070	dry coal bin (RMRHSD)	TBD	TBD	800	Amb.
OR-D-02-ST3070	dry coal bin (RMRHSD)	TBD	TBD	800	Amb.
OR-D-02-ST4070	dry coal bin (RMRHSD)	TBD	TBD	800	Amb.
OR-D-02-ST5070	dry coal bin (RMRHSD)	TBD	TBD	800	Amb.
OR-D-03-ST-1105	blend #1 weigh (RMRHSD)	TBD	TBD	2,500	Amb.
OR-D-04-ST1105	blend #1 feed (RMRHSD)	TBD	TBD	800	Amb.
OR-D-01-ST1215	coal dryer (CDD1)	TBD	TBD	30,000	Amb.
OR-D-01-ST2215	coal dryer (CDD2)	TBD	TBD	30,000	Amb.
OR-D-02-ST1105	coal crusher (CCD1)	TBD	TBD	2,500	Amb.
OR-D-02-ST2105	coal crusher (CCD2)	TBD	TBD	2,500	Amb.
OR-D-05-ST1205	Carborec crusher (CBSBD)	TBD	TBD	2,500	Amb.
OR-D-05-ST1405	Carborec crusher (CBSBD)	TBD	TBD	9,600	Amb.
OR-D-05-ST6070	Carborec bin (CBSBD)	TBD	TBD	850	Amb.
OR-D-06-ST1405	blend #2 bin (CBSBD)	TBD	TBD	850	Amb.
OR-D-06-ST1205	green fines (CBSBD)	TBD	TBD	2,500	Amb.
OR-D-12-ST1006	lime bin (LSD)	TBD	TBD	850	Amb.
OR-D-09-ST1045	FERAB D1	65.6	2.5	8,000	305
OR-D-09-ST2045	FERAB D2	65.6	2.5	8,000	305
OR-D-09-ST3045	FERAB D3	65.6	2.5	8,000	305
OT-D-09-ST4045	FERAB D4	65.6	2.5	8,000	305
OR-D-10-ST1025	PFRAB D1	42.7	6	8,000	305
OR-D-10-ST2025	PFRAB D2	42.7	6	8,000	305

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations. Tank emissions calculations performed by the Permittee using E.P.A. Tanks 4.09d and verified by IDEM.

Permit Level Determination – Part 70

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency."

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

PTE Before Controls of the New Units	
Pollutant	**Potential To Emit** (ton/yr)
PM	Greater than 25
PM_{10}	Greater than 25 & 15
$PM_{2.5}$	Greater than 25 & 10
SO_2	Greater than 40 & 25
VOC	Greater than 40 & 25
CO	Greater than 100
NO_X	Greater than 40 & 25

HAP PTE Before Controls of the New Units	
HAPs	**Potential To Emit** (ton/yr)
TOTAL	**Greater Than 25**

This source modification is subject to 326 IAC 2-7-10.5(f)(4) for modifications with a potential to emit greater than or equal to twenty-five (25) tons per year or more of any of the following pollutants: particulate matter (PM) or particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM10), sulfur dioxide (SO2), nitrogen oxides (NOx), and volatile organic compounds (VOC).

Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d)(1), because this modification does not qualify as a minor modification or administrative amendment.

Permit Level Determination – PSD and Emission Offset

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 permit modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	Potential to Emit (ton/yr)						
Process / Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**VOC**	**CO**	**NO_X**
CASP C	59.06	58.71	58.71	68.80	13.32	7.13	68.91
CASP D	59.06	58.71	58.71	68.80	13.32	7.13	68.91
Phase 1 Material Handling	74.38	27.53	3.65	0	0	0	0
Increased Utilization	8.81	6.01	6.01	6.75	0.03	0.37	1.61
Total for Phase 1 of Modification	**197.03**	**148.93**	**126.77**	**144.34**	**26.66**	**14.64**	**139.43**
Contemporaneous Increases	34.42	24.51	23.10	9.52	8.59	106.61	37.74
Contemporaneous Decreases							
#3 COB Shutdown	288.20	244.64	244.64	149.52	148.95	263.32	501.06
#3 COB Pre-Carb. Shutdown	75.45	73.56	73.56	4.73	374.25	2554.96	32.18
Net Emissions Increase after Phase 1	**-127.91**	**-142.73**	**-168.02**	**-0.38**	**-487.94**	**-2697.03**	**-356.06**
CASP A	59.06	58.71	58.71	68.80	13.32	7.13	68.91
CASP B	59.06	58.71	58.71	68.80	13.32	7.13	68.91
Phase 2 Increases to Project Material Handling	72.47	37.56	5.06	0	0	0	0
Contemporaneous Decreases							
#5 COB Shutdown	124.94	134.72	134.72	107.73	98.06	161.02	329.25
#7 COB Shutdown	122.72	107.83	107.83	66.23	102.84	168.87	345.31
#5/6 Quench Tower Shutdown	28.06	6.42	6.42	0	0	0	1.36
Net Emissions Increase for Modification	-213.03	-236.71	-294.50	-36.74	-663.55	-3012.66	-892.79
Significant Level 326 IAC 2-2 (PSD)	25	15	n/a	40	n/a	100	40
Significant Level 326 IAC 2-3 (Emission Offset)	n/a	n/a	n/a	n/a	25 (1 hr) / 40 (8 hr)	n/a	40
Significant Level 326 IAC 2-1.1-5 (Nonattainment NSR)	n/a	n/a	10	40	n/a	n/a	n/a

(a) Since this source is considered a major PSD source and the unrestricted potential to emit of this modification is greater than twenty-five (25) tons of PM, fifteen (15) tons of PM10, forty (40) tons of NOx, forty (40) tons of SO2, and one hundred (100) tons of CO per year, respectively, this source has elected to limit the potential to emit of this modification.

(b) Since this source is considered a major Emission Offset source and the unrestricted potential to emit of this modification is greater than twenty-five (25) tons of VOC and forty (40) tons of NOx per year, respectively, this source has elected to limit the potential to emit of this modification.

(c) Since this source is considered a major Nonattainment NSR source and the unrestricted potential to emit of this modification is greater than ten (10) tons of PM2.5 and forty (40) tons of SO2 per year, respectively, this source has elected to limit the potential to emit of this modification.

The potential to emit is limited as follows:

(a) PM, PM_{10}, $PM_{2.5}$, NOx, SO2, CO, and VOC emissions from the following units shall not exceed the emission limits listed in the table below:

Unit ID	Emission Limits (lbs/hr)				
	PM/ PM10/ PM2.5 (each)	NOx	SO2	CO	VOC
CASP A - Feed Enhancement Reactors					
FERA1	0.40	0.80	0.10	1.10E-07	0.25
FERA2	0.40	0.80	0.10	1.10E-07	0.25
FERA3	0.40	0.80	0.10	1.10E-07	0.25
FERA4	0.40	0.80	0.10	1.10E-07	0.25
CASP A - Particle Fusion Reactors					
PFRA1	3.10	3.20	7.60	9.20E-06	0.25
PFRA2	3.10	3.20	7.60	9.20E-06	0.25
CASP B - Feed Enhancement Reactors					
FERB1	0.40	0.80	0.10	1.10E-07	0.25
FERB2	0.40	0.80	0.10	1.10E-07	0.25
FERB3	0.40	0.80	0.10	1.10E-07	0.25
FERB4	0.40	0.80	0.10	1.10E-07	0.25
CASP B - Particle Fusion Reactors					
PFRB1	3.10	3.20	7.60	9.20E-06	0.25
PFRB2	3.10	3.20	7.60	9.20E-06	0.25
CASP C - Feed Enhancement Reactors					
FERC1	0.40	0.80	0.10	1.10E-07	0.25
FERC2	0.40	0.80	0.10	1.10E-07	0.25
FERC3	0.40	0.80	0.10	1.10E-07	0.25
FERC4	0.40	0.80	0.10	1.10E-07	0.25
CASP C - Particle Fusion Reactors					
PFRC1	3.10	3.20	7.60	9.20E-06	0.25
PFRC2	3.10	3.20	7.60	9.20E-06	0.25
CASP D - Feed Enhancement Reactors					
FERD1	0.40	0.80	0.10	1.10E-07	0.25
FERD2	0.40	0.80	0.10	1.10E-07	0.25
FERD3	0.40	0.80	0.10	1.10E-07	0.25
FERD4	0.40	0.80	0.10	1.10E-07	0.25
CASP D - Particle Fusion Reactors					
PFRD1	3.10	3.20	7.60	9.20E-06	0.25
PFRD2	3.10	3.20	7.60	9.20E-06	0.25

The control devices for each of the above Particle Fusion Reactors shall achieve one hundred percent (100%) capture of emissions.

(b) PM, PM_{10}, and $PM_{2.5}$ emissions from the following units shall not exceed the emission limits listed in the table below:

Facilities	Stack ID	PM/ PM10/ PM2.5 (lb/hr each)
coal dryer and associated dried coal conveyors (CDA1)	OR-A-01-ST1215	1.29
coal crusher and associated crushed coal conveyors (CCA1)	OR-A-02-ST1105	0.11
coal dryer and associated dried coal conveyors (CDA2)	OR-A-01-ST2215	1.29
coal crusher and associated crushed coal conveyors (CCA2)	OR-A-02-ST2105	0.11
lime storage silo (LSA)	OR-A-12-ST1006	0.04
coal dryer and associated dried coal conveyors (CDB1)	OR-B-01-ST1215	1.29
coal crusher and associated crushed coal conveyors (CCB1)	OR-B-02-ST1105	0.11
coal dryer and associated dried coal conveyors (CDB2)	OR-B-01-ST2215	1.29
coal crusher and associated crushed coal conveyors (CCB2)	OR-B-02-ST2105	0.11
lime storage silo (LSB)	OR-B-12-ST1006	0.04
coal dryer and associated dried coal conveyors (CDC1)	OR-C-01-ST1215	1.29
coal crusher and associated crushed coal conveyors (CCC1)	OR-C-02-ST1105	0.11
coal dryer and associated dried coal conveyors (CDC2)	OR-C-01-ST2215	1.29
coal crusher and associated crushed coal conveyors (CCC2)	OR-C-02-ST2105	0.11
lime storage silo (LSC)	OR-C-12-ST1006	0.04
coal dryer and associated dried coal conveyors (CDD1)	OR-D-01-ST1215	1.29
coal crusher and associated crushed coal conveyors (CCD1)	OR-D-02-ST1105	0.11
coal dryer and associated dried coal conveyors (CDD2)	OR-D-01-ST2215	1.29
coal crusher and associated crushed coal conveyors (CCD2)	OR-D-02-ST2105	0.11
lime storage silo (LSD)	OR-D-12-ST1006	0.04
CASP A - RMRHSA		
CDA1 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-A-01-ST1105	0.05
CDA2 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-A-01-ST2105	0.11
dry coal storage silo	OR-A-02-ST1070	0.03
dry coal storage silo	OR-A-02-ST2070	0.03
dry coal storage silo	OR-A-02-ST3070	0.03
dry coal storage silo	OR-A-02-ST4070	0.03
dry coal storage silo	OR-A-02-ST5070	0.03
blend #1 weigh feeders and drag conveyor	OR-A-03-ST1105	0.11
blend #1 feed hoppers and blend #1 hopper feed drag conveyors	OR-A-04-ST1105	0.03
CASP A - CBSBA		
Carborec crusher feed drag conveyors	OR-A-05-ST1205	0.11
weigh feeders and blend #2 drag conveyors	OR-A-05-ST1405	0.41

Facilities	Stack ID	PM/ PM10/ PM2.5 (lb/hr each)
Carborec storage silo	OR-A-05-ST6070	0.04
blend #2 surge bin	OR-A-06-ST1405	0.04
blend #2 weigh feeders, blend #2 drag conveyors, blend #2 crushers, hi-intensive mixers, pug mills, densifers, billet belt conveyors, billet roller screener, and billet fines weigh feeder	OR-A-06-ST1205	0.11
CASP B - RMRHSB		
CDB1 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-B-01-ST1105	0.05
CDB2 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-B-01-ST2105	0.11
dry coal storage silo	OR-B-02-ST1070	0.03
dry coal storage silo	OR-B-02-ST2070	0.03
dry coal storage silo	OR-B-02-ST3070	0.03
dry coal storage silo	OR-B-02-ST4070	0.03
dry coal storage silo	OR-B-02-ST5070	0.03
blend #1 weigh feeders and drag conveyor	OR-B-03-ST1105	0.11
blend #1 feed hoppers and blend #1 hopper feed drag conveyors	OR-B-04-ST1105	0.03
CASP B - CBSBB		
Carborec crusher feed drag conveyors	OR-B-05-ST1205	0.11
weigh feeders and blend #2 drag conveyors	OR-B-05-ST1405	0.41
Carborec storage silo	OR-B-05-ST6070	0.04
blend #2 surge bin	OR-B-06-ST1405	0.04
blend #2 weigh feeders, blend #2 drag conveyors, blend #2 crushers, hi-intensive mixers, pug mills, densifers, billet belt conveyors, billet roller screener, and billet fines weigh feeder	OR-B-06-ST1205	0.11
CASP C - RMRHSC		
CDC1 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-C-01-ST1105	0.05
CDC2 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-C-01-ST2105	0.11
dry coal storage silo	OR-C-02-ST1070	0.03
dry coal storage silo	OR-C-02-ST2070	0.03
dry coal storage silo	OR-C-02-ST3070	0.03
dry coal storage silo	OR-C-02-ST4070	0.03
dry coal storage silo	OR-C-02-ST5070	0.03
blend #1 weigh feeders and drag conveyor	OR-C-03-ST1105	0.11
blend #1 feed hoppers and blend #1 hopper feed drag conveyors	OR-C-04-ST1105	0.03
CASP C - CBSBC		
Carborec crusher feed drag conveyors	OR-C-05-ST1205	0.11
weigh feeders and blend #2 drag conveyors	OR-C-05-ST1405	0.41
Carborec storage silo	OR-C-05-ST6070	0.04

Facilities	Stack ID	PM/ PM10/ PM2.5 (lb/hr each)
blend #2 surge bin	OR-C-06-ST1405	0.04
blend #2 weigh feeders, blend #2 drag conveyors, blend #2 crushers, hi-intensive mixers, pug mills, densifers, billet belt conveyors, billet roller screener, and billet fines weigh feeder	OR-C-06-ST1205	0.11
CASP D - RMRHSD		
CDD1 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-D-01-ST1105	0.05
CDD2 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-D-01-ST2105	0.11
dry coal storage silo	OR-D-02-ST1070	0.03
dry coal storage silo	OR-D-02-ST2070	0.03
dry coal storage silo	OR-D-02-ST3070	0.03
dry coal storage silo	OR-D-02-ST4070	0.03
dry coal storage silo	OR-D-02-ST5070	0.03
blend #1 weigh feeders and drag conveyor	OR-D-03-ST1105	0.11
blend #1 feed hoppers and blend #1 hopper feed drag conveyors	OR-D-04-ST1105	0.03
CASP D - CBSBD		
Carborec crusher feed drag conveyors	OR-D-05-ST1205	0.11
weigh feeders and blend #2 drag conveyors	OR-D-05-ST1405	0.41
Carborec storage silo	OR-D-05-ST6070	0.04
blend #2 surge bin	OR-D-06-ST1405	0.04
blend #2 weigh feeders, blend #2 drag conveyors, blend #2 crushers, hi-intensive mixers, pug mills, densifers, billet belt conveyors, billet roller screener, and billet fines weigh feeder	OR-D-06-ST1205	0.11

(c) The input of coal to the following facilities shall be less than the limited amount per twelve (12) consecutive month period with compliance determined at the end of each month. The PM emissions shall not exceed 1.68 pounds per kton of coal input, the PM_{10} emissions shall not exceed 0.79 pound per kton of coal input, and the $PM_{2.5}$ emissions shall not exceed 0.12 pound per kton of coal input.

Facility Description	Facility ID (if Applicable)	Limited Input (tons per 12 month period)
Phase 1 CASP C/D Coal Feed Path		
PHS1 intermediate storage pile #1	n/a	750,000
phase 1 coal piles (4 piles)	n/a	750,000 (combined)
CASP C/D hopper feeder & conveyor	PHS1-HC1	750,000
PHS1 intermediate storage pile #2	n/a	750,000
Phase 1 CASP C Coal Feed Path		
CASP C coal feed conveyors	PHS1C-C1, PHS1C-C2	375,000 (each)

Phase 1 CASP D Coal Feed Path		
CASP D coal conveyors	PHS1D-C1, PHS1D-C2	375,000 (each)
Phase 2 CASP A/B/C/D Coal Feed Path		
CASP coal conveyors and CASP rotary stacker	CASP-C1, CASP-C2, CASP-RS1	1,500,000 (each)
four (4) CASP coal storage piles	n/a	1,500,000
Phase 2 CASP C Coal Feed Path		
CASP C - coal feed hopper No.1 and coal conveyors	CASPC-FH1 CASPC-C1, CASPC-C2	375,000 (each)
Phase 2 CASP D Coal Feed Path		
CASP D coal feed hopper No.1 and coal conveyors	CASPD-FH1, CASPD-C1, CASPD-C2	375,000 (each)

(1) The amount of coal handled by the Phase 1 CASP C/D Coal Feed Path facilities (PHS1 intermediate storage pile #1, phase 1 coal piles, PHS1-HC1, PHS1 intermediate storage pile #2) and the Phase 2 CASP A/B/C/D Coal Feed Path facilities (CASP-C1, CASP-C2, CASP-RS1, and CASP coal storage piles) shall be less than 1,500,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(2) The amount of coal handled by the Phase 1 CASP C Coal Feed Path facilities (PHS1C-C1 and PHS1C-C2) and the Phase 2 CASP C Coal Feed Path facilities (CASPC-FH1, CASPC-C1, and CASPC-C2) shall be less than 375,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(3) The amount of coal handled by the Phase 1 CASP D Coal Feed Path facilities (PHS1D-C1 and PHS1D-C2)and the Phase 2 CASP D Coal Feed Path facilities (CASPD-FH1, CASPD-C1, and CASPD-C2) shall be less than 375,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(d) The input of coal to the following facilities shall be less than the limited amount per twelve (12) consecutive month period with compliance determined at the end of each month. The PM emissions shall not exceed 1.68 pounds per kton of coal input, the PM_{10} emissions shall not exceed 0.79 pound per kton of coal input, and the $PM_{2.5}$ emissions shall not exceed 0.12 pound per kton of coal input.

Facility Description	Facility ID	Limited Input (tons per 12 month period)
CASP A - feed hopper, Conv. #1, Conv. #2, and coal feed hopper	CASPA-FH1, CASPA-C1 CASPA-C2, CASPA-FH2	375,000 (each)
CASP B - feed hopper, Conv. #1, Conv. #2, and coal feed hopper	CASPB-FH1, CASPB-C1 CASPB-C2, CASPB-FH2	375,000 (each)
CASP C coal feed hopper No.2	CASPC-FH2	375,000
CASP D coal feed hopper No.2	CASPD-FH2	375,000

(e) The input of billets or billet fines to the following facilities shall be less than the limited amount per twelve (12) consecutive month period with compliance determined at the end of each month. The PM emissions shall not exceed 0.41 pound per kton of material input,

the PM_{10} emissions shall not exceed 0.19 pound per kton of material input, and the $PM_{2.5}$ emissions shall not exceed 0.03 pound per kton of material input.

Facility Description	Facility ID (if Applicable)	Limited Input (tons per 12 month period)
CASP A - Billet Transfer Area		
billet fines hopper, and three (3) billet fine conveyors	OR-A-06-HP1125, OR-A-06-CB1130, OR-A-06-CB1140, OR-A-06-CB1145	50,000 (each)
billet drag conveyer and billet hopper	OR-A-06-CD1110, OR-A-06-HP1115,	375,000 (each)
billet belt conveyors	OR-A-06-CB1120, OR-A-06-CB1126	375,000 (combined)
billet belt conveyors	OR-A-06-CB2120, OR-A-06-CB2126	375,000 (combined)
billet vibratory feeders	OR-A-06-VF1125, OR-A-06-VF2126	375,000 (combined)
two (2) trolley loading pans	OR-A-06-LD1128	375,000 (combined)
two (2) trolley cars	OR-A-06-LD1128	375,000 (combined)
billet hopper and five (5) billet drag conveyors	OR-A-06-HP1135, OR-A-06-CD1150, OR-A-06-CD1160, OR-A-06-CD1170, OR-A-06-CD1180, OR-A-06-CD1190	375,000 (each)
CASP B - Billet Transfer Area		
billet fines hopper, and three (3) billet fine conveyors	OR-B-06-HP1125, OR-B-06-CB1130, OR-B-06-CB1140, OR-B-06-CB1145	50,000 (each)
billet drag conveyer and billet hopper	OR-B-06-CD1110, OR-B-06-HP1115,	375,000 (each)
billet belt conveyors	OR-B-06-CB1120, OR-B-06-CB1126	375,000 (combined)
billet belt conveyors	OR-B-06-CB2120, OR-B-06-CB2126	375,000 (combined)
billet vibratory feeders	OR-B-06-VF1125, OR-B-06-VF2126	375,000 (combined)
two (2) trolley loading pans	OR-B-06-LD1128	375,000 (combined)
two (2) trolley cars	OR-B-06-LD1128	375,000 (combined)
billet hopper and five (5) billet drag conveyors	OR-B-06-HP1135, OR-B-06-CD1150, OR-B-06-CD1160, OR-B-06-CD1170, OR-B-06-CD1180, OR-B-06-CD1190	375,000 (each)
CASP C - Billet Transfer Area		
billet fines hopper, and three (3) billet fine conveyors	OR-C-06-HP1125, OR-C-06-CB1130, OR-C-06-CB1140, OR-C-06-CB1145	50,000 (each)
billet drag conveyer and billet hopper	OR-C-06-CD1110, OR-C-06-HP1115,	375,000 (each)
billet belt conveyors	OR-C-06-CB1120, OR-C-06-CB1126	375,000 (combined)
billet belt conveyors	OR-C-06-CB2120, OR-C-06-CB2126	375,000 (combined)
billet vibratory feeders	OR-C-06-VF1125, OR-C-06-VF2126	375,000 (combined)

Facility Description	Facility ID (if Applicable)	Limited Input (tons per 12 month period)
two (2) trolley loading pans	OR-C-06-LD1128	375,000 (combined)
two (2) trolley cars	OR-C-06-LD1128	375,000 (combined)
billet hopper and five (5) billet drag conveyors	OR-C-06-HP1135, OR-C-06-CD1150, OR-C-06-CD1160, OR-C-06-CD1170, OR-C-06-CD1180, OR-C-06-CD1190	375,000 (each)
CASP D - Billet Transfer Area		
billet fines hopper, and three (3) billet fine conveyors	OR-D-06-HP1125, OR-D-06-CB1130, OR-D-06-CB1140, OR-D-06-CB1145	50,000 (each)
billet drag conveyer and billet hopper	OR-D-06-CD1110, OR-D-06-HP1115,	375,000 (each)
billet belt conveyors	OR-D-06-CB1120, OR-D-06-CB1126	375,000 (combined)
billet belt conveyors	OR-D-06-CB2120, OR-D-06-CB2126	375,000 (combined)
billet vibratory feeders	OR-D-06-VF1125, OR-D-06-VF2126	375,000 (combined)
two (2) trolley loading pans	OR-D-06-LD1128	375,000 (combined)
two (2) trolley cars	OR-D-06-LD1128	375,000 (combined)
billet hopper and five (5) billet drag conveyors	OR-D-06-HP1135, OR-D-06-CD1150, OR-D-06-CD1160, OR-D-06-CD1170, OR-D-06-CD1180, OR-D-06-CD1190	375,000 (each)

(f) The input of Cokonyx to the following facilities shall be less than the limited amount per twelve (12) consecutive month period with compliance determined at the end of each month. The PM emissions shall not exceed 1.90 pounds per kton of Cokonyx input, the PM_{10} emissions shall not exceed 0.90 pound per kton of Cokonyx input, and the $PM_{2.5}$ emissions shall not exceed 0.14 pound per kton of Cokonyx input.

Facility Description	Facility ID (if Applicable)	Limited Input (tons per 12 month period)
CASP A - Finish Product Handling & Loading Process		
Cokonyx belt conveyors	OR-A-08-CB1020, OR-A-08-CB1030	300,000 (combined)
Cokonyx belt conveyors	OR-A-08-CB2020, OR-A-08-CB2030	300,000 (combined)
Cokonyx belt conveyor	OR-A-08-CB1035	300,000
CASP B - Finish Product Handling & Loading Process		
Cokonyx belt conveyors	OR-B-08-CB1020, OR-B-08-CB1030	300,000 (combined)
Cokonyx belt conveyors	OR-B-08-CB2020, OR-B-08-CB2030	300,000 (combined)
Cokonyx belt conveyor	OR-B-08-CB1035	300,000
CASP C - Finish Product Handling & Loading Process		
Cokonyx belt conveyors	OR-C-08-CB1020, OR-C-08-CB1030	300,000 (combined)

Facility Description	Facility ID (if Applicable)	Limited Input (tons per 12 month period)
Cokonyx belt conveyors	OR-C-08-CB2020, OR-C-08-CB2030	300,000 (combined)
Cokonyx belt conveyor	OR-C-08-CB1035	300,000
CASP D - Finish Product Handling & Loading Process		
Cokonyx belt conveyors	OR-D-08-CB1020, OR-D-08-CB1030	300,000 (combined)
Cokonyx belt conveyors	OR-D-08-CB2020, OR-D-08-CB2030	300,000 (combined)
Cokonyx belt conveyor	OR-D-08-CB1035	300,000

(g) The input of Cokonyx to the following facilities shall be less than the limited amount per twelve (12) consecutive month period with compliance determined at the end of each month. The PM emissions shall not exceed 15.99 pounds per kton of Cokonyx input, the PM_{10} emissions shall not exceed 7.56 pounds per kton of Cokonyx input, and the $PM_{2.5}$ emissions shall not exceed 1.15 pounds per kton of Cokonyx input.

Facility Description	Facility ID (if Applicable)	Limited Input (tons per 12 month period)
CASP A - two (2) vibratory feeders	CASPA-VF1 CASPA-VF2	300,000 (combined)
CASP A - two (2) emergency bypass bunkers	CASPA-EB1 CASPA-EB2	300,000 (combined)
CASP A - Cokonyx conveyors	CKNXC-A1, CKNXC-A2	300,000 (combined)
CASP B - two (2) vibratory feeders	CASPB-VF1 CASPB-VF2	300,000 (combined)
CASP B - two (2) emergency bypass bunkers	CASPB-EB1 CASPB-EB2	300,000 (combined)
CASP A/B Emergency Storage Pile	n/a	600,000
CASP B - Cokonyx conveyors	CKNXC-B1, CKNXC-B2	300,000 (combined)
CASP A & B - Cokonyx conveyor	CKNXC-A/B	600,000
CASP A & B - Cokonyx storage bins	CKNXBin-A/B	600,000
CASP C - two (2) vibratory feeders	CASPC-VF1 CASPC-VF2	300,000 (combined)
CASP C - two (2) emergency bypass bunkers	CASPC-EB1 CASPC-EB2	300,000 (combined)
CASP C - Cokonyx conveyors	CKNXC-C1, CKNXC-C2	300,000 (combined)
CASP D - two (2) vibratory feeders	CASPD-VF1 CASPD-VF2	300,000 (combined)
CASP D - two (2) emergency bypass bunkers	CASPD-EB1 CASPD-EB2	300,000 (combined)
CASP C/D Emergency Storage Pile	n/a	600,000
CASP D - Cokonyx conveyors	CKNXC-D1, CKNXC-D2	300,000 (combined)
CASP C & D - Cokonyx conveyor	CKNXC-C/D	600,000
CASP C & D - Cokonyx storage bins	CKNXBin-C/D	600,000
Cokonyx loadout to railcar	CKNXLoadout	1,200,000

(h) The Permittee shall decommission and permanently shutdown the No. 3 Coke Battery Precarbonization facility, consisting of three (3): lines Line A (CH3A0017), Line B (CH3B0018), and Line C (CH3C0019); prior to startup of the first of the four (4) Carbon Alloy Synthesis Plants (CASP).

(i) Prior to startup of the first of the four (4) Carbon Alloy Synthesis Plants (CASP), the Permittee shall decommission and permanently shutdown No. 3 Coke Battery.

(j) Within one hundred eighty (180) days after startup of the third Carbon Alloy Synthesis Plant (CASP), the Permittee shall decommission and permanently shutdown either No. 5 Coke Battery or No. 7 Coke Battery.

(k) Within one hundred eighty (180) days after startup of the fourth Carbon Alloy Synthesis Plant (CASP), the Permittee shall decommission and permanently shutdown either No. 5 Coke Battery or No. 7 Coke Battery, whichever is still operational, and Nos. 5 and 6 Quench Towers.

Compliance with these limits will ensure the following:

(a) The PM, PM10, NOx, SO2, and CO emissions increase from the CASP modifications shall be less than twenty-five (25), fifteen (15), forty (40), forty (40), and one hundred (100) tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable to these modifications.

(b) The VOC and NOx emissions increase from the CASP modifications shall be less than twenty-five (25) and forty (40) tons per year, respectively. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) are rendered not applicable to these modifications.

(c) The PM2.5 and SO2 emissions increase from the CASP modifications shall be less than ten (10) and forty (40) tons per year, respectively. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) are rendered not applicable to these modifications.

Upon shutdown of No.3, No.5 and No.7 Coke Battery Ovens, less coke oven gas (COG) will be available for combustion at the various facilities that utilize the COG for combustion. These emission units may experience an increase in the amount of natural gas combusted as a result. Although combustion of natural gas results in higher emissions per MMBtu of NOx, PM, and VOC than the combustion of COG, this fuel change is not considered a change in the method of operation for these units. Pursuant to 326 IAC 2-2-1(ee)(2)(E), a physical change shall not include the use of an alternative fuel by a source that the source was capable of accommodating before January 6, 1975, unless the change would be prohibited under any enforceable permit condition. Since, the emission units were capable of combusting natural gas prior to January 6, 1975 and are not prohibited from combusting additional natural gas, the potential emissions increases are not considered part of the net emissions increase of this modification.

During October 2009, U.S. Steel utilized Cokonyx at the U.S. Steel Fairfield Works No. 8 Blast Furnace for the purpose of evaluating blast furnace performance. Based on the results, U.S. Steel contends that the use of Cokonyx in combination with coke does not have an impact the blast furnace emissions. This analysis is provided as Appendix B to this Technical Support Document.

Federal Rule Applicability Determination

NSPS:

40 CFR 60, Subpart Dc

The requirements of the New Source Performance Standard for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR 60, Subpart Dc) apply to steam generating units with a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr) for which construction, modification, or reconstruction is commenced after June 9, 1989. The Particle Fusion Reactors (PFR) are equipped with natural gas-fired burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr. The afterburners associated with each PFR are equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr.

(a) Feed Enhancement Reactors (FER) and the associated afterburners do not participate in the conversion of water to steam. Therefore, the FERs and the associated afterburners are not affected facilities under 40 CFR 60, Subpart Dc, and are not subject to the requirements of the NSPS.

(b) PFRs are tunnel-type kilns with various processing zones in which several reactions occur, converting Carborec to a semi-crystalline carbon alloy product, Cokonyx. Pursuant to 40 CFR 60.41c, the PFRs are process heaters since the primary use is to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst. Process heaters are not considered steam generating units under 40 CFR 60, Subpart Dc. Therefore, the Particle Fusion Reactors are not considered affected facilities and are not subject to the requirements of the NSPS.

(c) PFRs exhaust to afterburners which combust the off-gases prior to the gas stream passing through a heat recovery system, which converts water to stream via a heat exchanger. Therefore, the afterburners are considered steam generating units under 40 CFR 60, Subpart Dc, and are subject to the requirements of the NSPS. Pursuant to 40 CFR 60.41c, coal-derived synthetic fuels are derived from coal for the purpose of creating useful heat. Although the synthetic gas stream for the PFRs is derived from coal, the synthetic gas stream is not created for the purpose of useful heat. Therefore, the afterburners associated with the PFRs are not subject to the requirements for coal combustion.

(d) The following facilities at US Steel - Gary Works are subject to the requirements of 40 CFR 60, Subpart Dc, because they each are considered a steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr)

CASP Module A

- One (1) Particle Fusion Reactor (PFR) afterburner, identified as PFRAB A1, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-A-10-SR1010), one (1) cyclone (OR-A-10-CY-1115), and one (1) baghouse (OR-A-10-DC1020), in series, exhausting to stack OR-A-10-ST1025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.
- One (1) Particle Fusion Reactor (PFR) afterburner, identified as PFRAB A2, exhausting through an clean energy recovery process (CERP) to one (1) spray

scrubber (OR-A-10-SR2010), one (1) cyclone (OR-A-10-CY-2115), and one (1) baghouse (OR-A-10-DC2020), in series, exhausting to stack OR-A-10-ST2025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

CASP Module B

- One (1) Particle Fusion Reactor (PFR) afterburner, identified as PFRAB B1, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-B-10-SR1010), one (1) cyclone (OR-B-10-CY-1115), and one (1) baghouse (OR-B-10-DC1020), in series, exhausting to stack OR-B-10-ST1025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.
- One (1) Particle Fusion Reactor (PFR) afterburner, identified as PFRAB B2, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-B10-SR2010), one (1) cyclone (OR-B-10-CY-2115), and one (1) baghouse (OR-B-10-DC2020), in series, exhausting to stack OR-B-10-ST2025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

CASP Module C

- One (1) Particle Fusion Reactor (PFR) afterburner, identified as PFRAB C1, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-C-10-SR1010), one (1) cyclone (OR-C-10-CY-1115), and one (1) baghouse (OR-C-10-DC1020), in series, exhausting to stack OR-C-10-ST1025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.
- One (1) Particle Fusion Reactor (PFR) afterburner, identified as PFRAB C2, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-C-10-SR2010), one (1) cyclone (OR-C-10-CY-2115), and one (1) baghouse (OR-C-10-DC2020), in series, exhausting to stack OR-C-10-ST2025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

CASP Module D

- One (1) Particle Fusion Reactor (PFR) afterburner, identified as PFRAB D1, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-D-10-SR1010), one (1) cyclone (OR-D-10-CY-1115), and one (1) baghouse (OR-D-10-DC1020), in series, exhausting to stack OR-D-10-ST1025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.
- One (1) Particle Fusion Reactor (PFR) afterburner, identified as PFRAB D2, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-D-10-SR2010), one (1) cyclone (OR-D-10-CY-2115), and one (1) baghouse (OR-D-10-DC2020), in series, exhausting to stack OR-D-10-ST2025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(e) Nonapplicable portions of the NSPS will not be included in the permit. These facilities are subject to the following portions of 40 CFR 60, Subpart Dc.

(1) 40 CFR 60.40c (a), (b), and (c)
(2) 40 CFR 60.41c
(3) 40 CFR 60.48c (a)(1), (a)(2), (a)(3), (g)(1), (g)(2), (i), and (j)

The provisions of 40 CFR 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, apply to the facilities described in this section except when otherwise specified in 40 CFR 60, Subpart Dc.

40 CFR 60, Subpart Y

(a) The requirements of the Standards of Performance for Coal Preparation and Processing Plants (40 CFR 60, Subpart Y), which is incorporated by reference as 326 IAC 12, apply to affected facilities in coal preparation and processing plants that process more than 181 megagrams (Mg) (200 tons) of coal per day. The coal preparation facilities at US Steel process more than 200 tons of coal per day.

(b) The following facilities at US Steel - Gary Works are subject to the requirements of 40 CFR 60, Subpart Y, because they are considered thermal dryers, coal processing and conveying equipment (including breakers and crushers), and coal storage systems, transfer and loading systems under the Subpart and commenced construction, reconstruction or modification after May 27, 2009:

CASP Module A

- Raw Material Receiving Handling and Silos A, identified as RMRHSA, consisting of the following (Under 40 CFR 60, Subpart Y, the RMRHSA facilities are considered coal processing and conveying equipment):
  - One (1) CDA1 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors.
  - One (1) CDA2 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors.
  - Five (5) dry coal storage silos.
  - Five (5) blend #1 weigh bins and one (1) drag conveyor.
  - Four (4) blend #1 feed hoppers and two (2) blend #1 hopper feed drag conveyors.
- One (1) coal dryer and associated dried coal conveyors, identified as CDA1. Under 40 CFR 60, Subpart Y, this is considered a thermal dryer constructed after May 27, 2009.
- One (1) coal crusher and associated crushed coal conveyors, identified as CCA1. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment constructed after May 27, 2009.
- One (1) coal dryer and associated dried coal conveyors, identified as CDA2. Under 40 CFR 60, Subpart Y, this is considered a thermal dryer constructed after May 27, 2009.
- One (1) coal crusher and associated crushed coal conveyors, identified as CCA2. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment constructed after May 27, 2009.
- One (1) Carborec Storage and Blending Area A, identified as CBSBA, consisting of the following (Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems):
  - Carborec crusher feed drag conveyors.
  - Six (6) weigh feeders and blend #2 drag conveyors.
  - One (1) Carborec storage silo.
  - One (1) blend #2 surge bin.
  - Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) drag conveyors, three (3) hi-intensive mixers, three (3) pug mills, three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder.

CASP Module B

- Raw Material Receiving Handling and Silos B, identified as RMRHSB, consisting of the following (Under 40 CFR 60, Subpart Y, the RMRHSB facilities are considered coal processing and conveying equipment):

    - One (1) CDB1 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors.
    - One (1) CDB2 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors.
    - Five (5) dry coal storage silos.
    - Five (5) blend #1 weigh bins and one (1) drag conveyor.
    - Four (4) blend #1 feed hoppers and two (2) blend #1 hopper feed drag conveyors.
- One (1) coal dryer and associated dried coal conveyors, identified as CDB1. Under 40 CFR 60, Subpart Y, this is considered a thermal dryer constructed after May 27, 2009.
- One (1) coal crusher and associated crushed coal conveyors, identified as CCB1. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment constructed after May 27, 2009.
- One (1) coal dryer and associated dried coal conveyors, identified as CDB2. Under 40 CFR 60, Subpart Y, this is considered a thermal dryer constructed after May 27, 2009.
- One (1) coal crusher and associated crushed coal conveyors, identified as CCB2. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment constructed after May 27, 2009.
- One (1) Carborec Storage and Blending Area B, identified as CBSBB, consisting of the following (Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems):
    - Carborec crusher feed drag conveyors.
    - Six (6) weigh feeders and blend #2 drag conveyors.
    - One (1) Carborec storage silo.
    - One (1) blend #2 surge bin.
    - Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) drag conveyors, three (3) hi-intensive mixers, three (3) pug mills, three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder.

<u>CASP Module C</u>

- Raw Material Receiving Handling and Silos C, identified as RMRHSC, consisting of the following (Under 40 CFR 60, Subpart Y, the RMRHSC facilities are considered coal processing and conveying equipment):
    - One (1) CDC1 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors.
    - One (1) CDC2 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors.
    - Five (5) dry coal storage silos.
    - Five (5) blend #1 weigh bins and one (1) drag conveyor.
    - Four (4) blend #1 feed hoppers and two (2) blend #1 hopper feed drag conveyors.
- One (1) coal dryer and associated dried coal conveyors, identified as CDC1. Under 40 CFR 60, Subpart Y, this is considered a thermal dryer constructed after May 27, 2009.
- One (1) coal crusher and associated crushed coal conveyors, identified as CCC1. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment constructed after May 27, 2009.
- One (1) coal dryer and associated dried coal conveyors, identified as CDC2. Under 40 CFR 60, Subpart Y, this is considered a thermal dryer constructed after May 27, 2009.
- One (1) coal crusher and associated crushed coal conveyors, identified as CCC2. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment constructed after May 27, 2009.

- One (1) Carborec Storage and Blending Area C, identified as CBSBC, consisting of the following (Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems):
  - Carborec crusher feed drag conveyors.
  - Six (6) weigh feeders and blend #2 drag conveyors.
  - One (1) Carborec storage silo.
  - One (1) blend #2 surge bin.
  - Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) drag conveyors, three (3) hi-intensive mixers, three (3) pug mills, three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder.

<u>CASP Module D</u>

- Raw Material Receiving Handling and Silos D, identified as RMRHSD, consisting of the following (Under 40 CFR 60, Subpart Y, the RMRHSD facilities are considered coal processing and conveying equipment):
  - One (1) CDD1 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors.
  - One (1) CDD2 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors.
  - Five (5) dry coal storage silos.
  - Five (5) blend #1 weigh bins and one (1) drag conveyor.
  - Four (4) blend #1 feed hoppers and two (2) blend #1 hopper feed drag conveyors.
- One (1) coal dryer and associated dried coal conveyors, identified as CDD1. Under 40 CFR 60, Subpart Y, this is considered a thermal dryer constructed after May 27, 2009.
- One (1) coal crusher and associated crushed coal conveyors, identified as CCD1. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment constructed after May 27, 2009.
- One (1) coal dryer and associated dried coal conveyors, identified as CDD2. Under 40 CFR 60, Subpart Y, this is considered a thermal dryer constructed after May 27, 2009.
- One (1) coal crusher and associated crushed coal conveyors, identified as CCD2. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment constructed after May 27, 2009.
- One (1) Carborec Storage and Blending Area D, identified as CBSBD, consisting of the following (Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems):
  - Carborec crusher feed drag conveyors.
  - Six (6) weigh feeders and blend #2 drag conveyors.
  - One (1) Carborec storage silo.
  - One (1) blend #2 surge bin.
  - Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) drag conveyors, three (3) hi-intensive mixers, three (3) pug mills, three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder.

<u>CASP Raw Material Receiving and Handling</u>

- Phase 1 CASP C and CASP D coal handling, consisting of the following (Under 40 CFR 60, Subpart Y, the CASP Raw Material Receiving and Handling facilities are considered coal processing and conveying equipment, and coal storage systems.):
  - One (1) feed hopper and conveyor No.1, identified as PHS1-HC1.
  - Two (2) CASP C coal conveyors, identified as PHS1C-C1 and PHS1C-C2.
  - One (1) CASP C coal feed hopper No.2, identified as CASPC-FH2.

    - Two (2) CASP D coal conveyors, identified as PHS1D-C1 and PHS1D-C2.
    - One (1) CASP D coal feed hopper No.2, identified as CASPD-FH2.
- Phase 2 CASP coal handling, consisting of the following (Under 40 CFR 60, Subpart Y, the CASP Raw Material Receiving and Handling facilities are considered coal processing and conveying equipment, and coal storage systems.):
    - Two (2) CASP coal conveyors, identified as CASP-C1 and CASP-C2.
    - One (1) CASP rotary stacker CASP-RS1.
    - Four (4) CASP coal conveyor feed hoppers No.1, identified as CASPA-FH1, CASPB-FH1, CASPC-FH1, and CASPD-FH1.
    - Two (2) CASP A coal conveyors, identified as CASPA-C1 and CASPA-C2.
    - One (1) CASP A coal feed hopper No.2, identified as CASPA-FH2.
    - Two (2) CASP B coal conveyors, identified as CASPB-C1 and CASPB-C2.
    - One (1) CASP B coal feed hopper No.2, identified as CASPB-FH2.
    - Two (2) CASP C coal conveyors, identified as CASPC-C1 and CASPC-C2.
    - Two (2) CASP D coal conveyors, identified as CASPD-C1 and CASPD-C2.
- Storage Piles (Under 40 CFR 60, Subpart Y, these storage piles are each considered open storage piles.)
    - One (1) PHS1 intermediate coal storage pile No. 1.
    - Four (4) PHS1 coal storage piles.
    - One (1) PHS1 intermediate coal storage pile No. 2.
    - Four (4) CASP coal storage piles.

(c) Nonapplicable portions of the NSPS will not be included in the permit. These facilities are subject to the following portions of 40 CFR 60, Subpart Y.

(1) 40 CFR 60.250 (a) and (d)
(2) 40 CFR 60.251
(3) 40 CFR 60.252 (b)(1)(i), (b)(2)(iii), (b)(3)(iii)
(4) 40 CFR 60.253 (b)
(5) 40 CFR 60.254 (b) and (c)
(6) 40 CFR 60.255 (b) through (f) and (h)
(7) 40 CFR 60.257 (a), (b)(1) through (b)(5)
(8) 40 CFR 60.258 (a)(1) through (6), (b)(3), (c), and (d)

The provisions of 40 CFR 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, apply to the facilities described in this section except when otherwise specified in 40 CFR 60, Subpart Y.

<u>40 CFR 60, Subpart IIII</u>

(a) The following generators are subject to the requirements of the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60, Subpart IIII), which is incorporated by reference as 326 IAC 12, because they are considered emergency stationary compression ignition (CI) internal combustion engines (ICE) that were manufactured after April 1, 2006, and are not fire pump engines:

<u>CASP Module A</u>
- Two (2) diesel-fired emergency generators, identified as EGA1 and EGA2.
- One (1) natural gas-fired emergency generator, identified as EGA3.

<u>CASP Module B</u>
- Two (2) diesel-fired emergency generators, identified as EGB1 and EGB2.
- One (1) natural gas-fired emergency generator, identified as EGB3.

<u>CASP Module C</u>
- Two (2) diesel-fired emergency generators, identified as EGC1 and EGC2.

- One (1) natural gas-fired emergency generator, identified as EGC3.

CASP Module D
- Two (2) diesel-fired emergency generators, identified as EGD1 and EGD2.
- One (1) natural gas-fired emergency generator, identified as EGD3.

(b) The following generators are subject to the requirements of the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60, Subpart IIII), which is incorporated by reference as 326 IAC 12, because they are considered stationary compression ignition (CI) internal combustion engines (ICE) that are fire pump engines that were manufactured as certified National Fire Protection Association (NFPA) fire pump engines after July 1, 2006:

CASP Module A
One (1) diesel-fired stationary fire pump, identified as FPA.

CASP Module B
One (1) diesel-fired stationary fire pump, identified as FPB.

CASP Module C
One (1) diesel-fired stationary fire pump, identified as FPC.

CASP Module D
One (1) diesel-fired stationary fire pump, identified as FPD.

(c) Nonapplicable portions of the NSPS will not be included in the permit. These facilities are subject to the following portions of 40 CFR 60, Subpart IIII:

(1) 40 CFR 60.4200 (a)(2)
(2) 40 CFR 60.4205 (b), (c), and (d)
(3) 40 CFR 60.4206
(4) 40 CFR 60.4207 (a) and (b)
(5) 40 CFR 60.4208
(6) 40 CFR 60.4209
(7) 40 CFR 60.4211 (a), (c), (d)(1), (d)(2), and (e)
(8) 40 CFR 60.4213
(9) 40 CFR 60.4214 (b) and (c)
(10) 40 CFR 60.4217
(11) 40 CFR 60.4218
(12) 40 CFR 60.4219
(13) Table 3 to Subpart IIII of Part 60 (as applicable)
(14) Table 4 to Subpart IIII of Part 60 (as applicable)
(15) Table 5 to Subpart IIII of Part 60 (as applicable)
(16) Table 7 to Subpart IIII of Part 60 (as applicable)
(17) Table 8 to Subpart IIII of Part 60 (as applicable)

The provisions of 40 CFR 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, apply to the facilities described in this section except when otherwise specified in 40 CFR 60, Subpart IIII.

40 CFR 60, Subpart Kb

The requirements of the New Source Performance Standard for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 (40 CFR 60, Subpart Kb) applies to each storage vessel with a capacity greater than or equal to 75 cubic meters

(m^3) (19,812.9 gallons) that is used to store volatile organic liquids (VOL). The storage tanks (STO1 A, STO2 A, STO3 A, STO4 A, STO1 B, STO2 B, STO3 B, STO4 B, STO1 C, STO2 C, STO3 C, STO4 C, STO1 D, STO2 D, STO3 D, and STO4 D) each have a storage capacity less than 19,812.9 gallons. Therefore, the requirements of 40 CFR 60, Subpart Kb, do not apply to the storage tanks.

40 CFR 60, Subpart RRR

The requirements of the New Source Performance Standard for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes (40 CFR 60, Subpart RRR) applies to each designated facility that is part of a process unit that produces any of the chemicals listed in 40 CFR 60.707 as a product, co-product, by-product, or intermediate, except of provided in 40 CFR 60.700(c). Neither the Feed Enhancement Reactors (FER) nor the Particle Fusion Reactors (PFR) produces any of the chemicals listed in 40 CFR 60.707. Therefore, the requirements of 40 CFR 60, Subpart RRR, do not apply.

NESHAP:

40 CFR 63, Subpart ZZZZ

(a) The emergency generators are subject to the National Emission Standards for Hazardous Air Pollutants for National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) (40 CFR 63.6580, Subpart ZZZZ), which is incorporated by reference as 326 IAC 20-82. Each generator is considered a new emergency stationary RICE, since construction of each generator will commence on or after December 19, 2002. Additionally, each diesel-fired stationary fire pump is considered a new emergency stationary RICE under this Subpart.

(1) Pursuant to 40 CFR 63.6590(b), a new emergency stationary RICE with a site rating of more than 500 brake horsepower located at a major source of HAP emissions does not have to meet the requirements of 40 CFR 63, Subpart ZZZZ, and of 40 CFR 63, Subpart A, except for the initial notification requirements of 40 CFR 63.6645(h). The following facilities are subject to this rule:

CASP Module A
- Two (2) diesel-fired emergency generators, identified as EGA1 and EGA2.
- One (1) natural gas-fired emergency generator, identified as EGA3.

CASP Module B
- Two (2) diesel-fired emergency generators, identified as EGB1 and EGB2.
- One (1) natural gas-fired emergency generator, identified as EGB3.

CASP Module C
- Two (2) diesel-fired emergency generators, identified as EGC1 and EGC2.
- One (1) natural gas-fired emergency generator, identified as EGC3.

CASP Module D
- Two (2) diesel-fired emergency generators, identified as EGD1 and EGD2.
- One (1) natural gas-fired emergency generator, identified as EGD3.

Nonapplicable portions of the NESHAP will not be included in the permit. These facilities are subject to the following portions of 40 CFR 63, Subpart ZZZZ:

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585 (a) and (b)

(3) 40 CFR 63.6590 (b)(i) and (b)(ii)
(4) 40 CFR 63.6645(h)

(2) Pursuant to 40 CFR 60.6590(c), an affected source that is a new stationary RICE located at a major source of HAP emissions and is an emergency or limited-use stationary RICE with a site rating of less than or equal to 500 brake HP, must meet the requirements of this part by meeting the requirements of 40 CFR Part 60 Subpart IIII, for compression ignition engines. No further requirements apply for such engines under this part. The following facilities are subject to this rule:

CASP Module A
- One (1) diesel-fired stationary fire pump, identified as FPA.

CASP Module B
- One (1) diesel-fired stationary fire pump, identified as FPB.

CASP Module C
- One (1) diesel-fired stationary fire pump, identified as FPC.

CASP Module D
- One (1) diesel-fired stationary fire pump, identified as FPD.

40 CFR 63, Subpart L

The provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Coke Oven Batteries (40 CFR 63, Subpart L) apply to coke oven batteries.

(a) Pursuant to 40 CFR 63.301 the following definitions apply to coke oven batteries:

1) coke oven battery means either a by-product or nonrecovery coke oven battery;
2) by-product coke oven battery means a source consisting of a group of ovens connected by common walls, where coal undergoes destructive distillation under positive pressure to produce coke and coke oven gas, from which by-products are recovered.
3) nonrecovery coke oven battery means a source consisting of a group of ovens connected by common walls and operated as a unit, where coal undergoes destructive distillation under negative pressure to produce coke, and which is designed for the combustion of the coke oven gas from which by-products are not recovered.

Neither the Feed Enhancement Reactors nor the Particle Fusion Reactors consist of a group of ovens. Rather, each facility is comprised of a single oven.

(b) Neither the FER nor PFR operate in a method similar to a coke oven battery or have emissions points similar to those associated with a coke oven battery. A FER is a totally enclosed rotary kiln operating under negative pressure at temperatures less than 1,000 ^{0}F. Coal is not batch "charged"; rather, it is continuously fed to the FER via a conveyor. Upon completion of the coal conversion, a "pushing" operation does not occur. The resulting Carborec continuously exits the lower end of the rotary kiln and is transfered to a cooling area then to the Carborec storage and blending area via enclosed conveyors. A PFR is an enclosed tunnel kiln, operating under negative pressure at at temperatures between 300 ^{0}F and 2,000 ^{0}F. Carborec is blended with additional coal and additives to form billets which are continuously fed into the PFR via trolley cars. After the trolley cars traverse the length of the kiln, the resulting product (Cokonxy) is misted with water while the trolley cars travel through a short tunnel. Therefore, the product carried on the trolley cars is neither "charged" to the PFR nor does "pushing" occur. Since the Cokonyx is misted with water rather than "deluged", quenching does not occur. The FER and PFR

are not underfired and the designs do not include a bypass/bleeder stack, a door, a collecting main, an offtake system, a shed, or a topside port lid.

(c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Coke Oven Batteries (40 CFR 63, Subpart L) are not included in this modification.

40 CFR 63, Subpart CCCCC

The provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Coke Ovens: Pushing, Quenching, and Battery Stacks (40 CFR 63, Subpart CCCCC) apply to coke oven batteries.

(a) Pursuant to 40 CFR 63.7352, the following definitions apply to coke oven batteries:

1) Coke oven battery means a group of ovens connected by common walls, where coal undergoes destructive distillation to produce coke. A coke oven battery includes by-product and non-recovery processes.
2) By-product coke oven battery means a group of ovens connected by common walls, where coal undergoes destructive distillation under positive pressure to produce coke and coke oven gas from which by-products are recovered.
3) Non-recovery coke oven battery means a group of ovens connected by common walls and operated as a unit, where coal undergoes destructive distillation under negative pressure to produce coke, and which is designed for the combustion of the coke oven gas from which by-products are not recovered

Neither the Feed Enhancement Reactors nor the Particle Fusion Reactors consist of a group of ovens. Rather, each facility is comprised of a single oven.

(b) See Federal Rule Applicablity Determination Section for NESHAP, 40 CFR 63, Subpart L of this document for a detailed description of a Feed Enchancement Reactor and Particle Fusion Reactor.

(c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Coke Ovens: Pushing, Quenching, and Battery Stacks (40 CFR 63, Subpart CCCCC) are not included in this modification.

CAM

(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each new or modified pollutant-specific emission unit that meets the following criteria:

(1) has a potential to emit before controls equal to or greater than the Part 70 major source threshold for the pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant; and

(3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following tables are used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each new or modified emission unit involved:

CAM Applicability Analysis							
Emission Unit	**Control Device Used**	**Emission Limitation** (Y/N)	**Uncontrolled PTE** (ton/yr)	**Controlled PTE** (ton/yr)	**Part 70 Major Source Threshold** (ton/yr)	**CAM Applicable** (Y/N)	**Large Unit** (Y/N)
PM/PM10/PM2.5							
Each FER	Y	Y	175.2	1.75	100	Y	N
Each PFR	Y	Y	1357.8	13.58	100	Y	N
SO2							
Each FER	Y	Y	9.64	0.44	100	N	N
Each PFR	Y	Y	664.01	33.29	100	Y	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to each Feed Enhancement Reactor (FER) for PM, PM10, and PM2.5, and to each Particle Fusion Reactor (PFR) for PM, PM10, PM2.5, and SO2 upon issuance of the Title V Renewal. The requirements of CAM are applicable because the units each have uncontrolled potential to emit above the major source thresholds for PM, PM10, and PM2.5, are subject to an emissions limit for each pollutant, and use a control device to comply with the emissions limit. Since these units are new units and are not considered large units, a CAM plan must be submitted as part of the Second Part 70 Operating Permit Renewal application.

CAM Applicability Analysis							
Emission Unit	**Control Device Used**	**Emission Limitation** (Y/N)	**Uncontrolled PTE** (ton/yr)	**Controlled PTE** (ton/yr)	**Part 70 Major Source Threshold** (ton/yr)	**CAM Applicable** (Y/N)	**Large Unit** (Y/N)
PM/PM10/PM2.5							
wet coal (RMRHSX)	Y	Y	> 100	< 100	100	Y	N
wet coal (RMRHSX)	Y	Y	> 100	< 100	100	Y	N
dry coal bin (RMRHSX)	Y	Y	> 100	< 100	100	Y	N
dry coal bin (RMRHSX)	Y	Y	> 100	< 100	100	Y	N
dry coal bin (RMRHSX)	Y	Y	> 100	< 100	100	Y	N
dry coal bin (RMRHSX)	Y	Y	> 100	< 100	100	Y	N
dry coal bin (RMRHSX)	Y	Y	> 100	< 100	100	Y	N
coal dryer (CDX1)	Y	Y	> 100	< 100	100	Y	N
dry dryer (CDX2)	Y	Y	> 100	< 100	100	Y	N
coal crusher (CCX1)	Y	Y	> 100	< 100	100	Y	N
coal crusher (CCX2)	Y	Y	> 100	< 100	100	Y	N
blend #1 (CBSBX)	Y	Y	> 100	< 100	100	Y	N
blend #1 feed hopper (CBSBX)	Y	Y	> 100	< 100	100	Y	N
Carborec crusher (CBSBX)	Y	Y	> 100	< 100	100	Y	N
Carborec crusher (CBSBX)	Y	Y	> 100	< 100	100	Y	N

CAM Applicability Analysis							
Emission Unit	**Control Device Used**	**Emission Limitation** (Y/N)	**Uncontrolled PTE** (ton/yr)	**Controlled PTE** (ton/yr)	**Part 70 Major Source Threshold** (ton/yr)	**CAM Applicable** (Y/N)	**Large Unit** (Y/N)
Carborec bin (CBSBX)	Y	Y	> 100	< 100	100	Y	N
blend #2 bin (CBSBX)	Y	Y	> 100	< 100	100	Y	N
green fines (FPHLX)	Y	Y	> 100	< 100	100	Y	N
lime bin (LSX)	Y	Y	> 100	< 100	100	Y	N

Where X = A for CASP A, B for CASP B, C for CASP C, D for CASP D

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to each of the emission units listed in the above table for PM, PM10, and PM2.5 upon issuance of the Title V Renewal. The requirements of CAM are applicable because the units each have uncontrolled potential to emit above the major source thresholds for PM, PM10, and PM2.5, are subject to an emissions limit for each pollutant, and use a control device to comply with the emissions limit. Since these units are new units and are not considered large units, a CAM plan must be submitted as part of the Second Part 70 Operating Permit Renewal application.

State Rule Applicability Determination

326 IAC 2-1.1-5 (Nonattainment New Source Review)
Nonattainment New Source Review applicability is discussed under the Permit Level Determination – PSD and Emission Offset section.

326 IAC 2-2 and 2-3 (PSD and Emission Offset)
PSD and Emission Offset applicability is discussed under the Permit Level Determination – PSD and Emission Offset section.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The operation of each Carbon Alloy Synthesis Plant (CASP) Module will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply. Although the calculation does not speciate HAPs, AP-42 Chapter 12.2 - Coke Production estimates emissions from the distillation of coal into coke. Based on the information provided, it is reasonable to expect the HAP emissions from the FERs and PFRs to be comprised of a large spectrum of individual HAPs with the concentration of no single HAP large enough exceed the ten (10) ton per year threshold.

326 IAC 3-5 (Continuing Monitoring of Emissions)
Pursuant to 326 IAC 3-5(c)(7), sources making coke from coal shall monitor opacity on the underfire stack associated with each coke oven battery.

Pursuant to 326 IAC 1-2-16, a coke oven battery is any series of jointly operated slot type coke ovens, the operation of which results in the destructive distillation of coal for conversion to coke. Neither the Feed Enhancement Reactors nor the Particle Fusion Reactors consist of a series of jointly operated ovens. Rather, each facility is comprised of a single oven. See Federal Rule Applicablity Determination Section for NESHAP, 40 CFR 63, Subpart L of this document for a detailed description of a Feed Enchancement Reactor and Particle Fusion Reactor. The requirements of 326 IAC 3-5 are not included in this permit modification for the FERs and PFRs.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(c)(3), the requirements of 326 IAC 6-3 are not applicable if a particulate matter limitation is established in 326 IAC 6.8. Since all facilities associated with this permitting action are subject to a particulate matter limitation under 326 IAC 6.8, the requirements of 326 IAC 6-3-2 are not applicable.

326 IAC 6.8-1-2 (Particulate Emission Limitations for Lake County)
This source is located in Lake County and the actual PM emissions from this source are greater than ten (10) tons per year. Therefore, facilities not specifically identified in 326 IAC 6.8-2 through 326 IAC 6.8-11, are subject to the requirements of 326 IAC 6.8-1-2.

Pursuant to 326 IAC 6.8-1-2(a), particulate matter (PM) from each of the following facilities shall not exceed three-hundredths (0.03) grain per dry cubic foot (dscf).

Unit ID	Facility	Control Device (ID)
	CASP A	
RMRHSA	wet coal	OR-A-01-DC1105
RMRHSA	wet coal	OR-A-01-DC2105
RMRHSA	dry coal bin	OR-A-02-DC1070
RMRHSA	dry coal bin	OR-A-02-DC2070
RMRHSA	dry coal bin	OR-A-02-DC3070
RMRHSA	dry coal bin	OR-A-02-DC4070
RMRHSA	dry coal bin	OR-A-02-DC5070
CDA1	coal dryer	OR-A-01-CY1305 OR-A-01-DC1205
CDA2	coal dryer	OR-A-01-CY2305 OR-A-01-DC2205
CCA1	coal crusher	OR-A-02-DC1105
CCA2	coal crusher	OR-A-02-DC2105
CBSBA	blend #1	OR-A-03-DC1105
CBSBA	blend #1 feed hopper	OR-A-04-DC1105
CBSBA	Carborec crusher	OR-A-05-DC1205
CBSBA	crushed blend #2	OR-A-05-DC1305
CBSBA	Carborec crusher	OR-A-05-DC1405
CBSBA	Carborec bin	OR-A-05-DC6070
CBSBA	blend #2 bin	OR-A-06-DC1405
CBSBA	green fines	OR-A-06-DC1205
LSA	lime bin	OR-A-12-DC1006
FERA1 & FERAB A1	Feed Enhancement Reactor 1 & FERA1 Afterburner (combined)	Scrubber(OR-A-09-SR-1015) Cyclone (OR-A-09-CY-1025) & Baghouse (OR-A-09-DC1030)
FERA2 & FERAB A2	Feed Enhancement Reactor 2 & FERA2 Afterburner (combined)	Scrubber(OR-A-09-SR-2015) Cyclone (OR-A-09-CY-2025) & Baghouse (OR-A-09-DC2030)
FERA3 & FERAB A3	Feed Enhancement Reactor 3 & FERA3 Afterburner (combined)	Scrubber(OR-A-09-SR-3015) Cyclone (OR-A-09-CY-3025) & Baghouse (OR-A-09-DC3030)
FERA4 & FERAB A4	Feed Enhancement Reactor 4 & FERA4 Afterburner (combined)	Scrubber(OR-A-09-SR-4015) Cyclone (OR-A-09-CY-4025) & Baghouse (OR-A-09-DC4030)

Unit ID	Facility	Control Device (ID)
PFRA1 & PFRAB A1	Particle Fusion Reactor 1 & PFRA1 Afterburner (combined)	Scrubber(OR-A-10-SR-1010) Cyclone (OR-A-10-CY-1115) & Baghouse (OR-A-10-DC1020)
PFRA2 & PFRAB A2	Particle Fusion Reactor 2 & PFRA2 Afterburner (combined)	Scrubber(OR-A-10-SR-2010) Cyclone (OR-A-10-CY-2115) & Baghouse (OR-A-10-DC2020)
EGA1	Diesel-Fired Emergency Generator	none
EGA2	Diesel-Fired Emergency Generator	none
EGA3	NG-Fired Emergency Generator	none
FPA	Diesel-Fired Fire Pump	none
PFRCT A1	Cooling Tower System	none
PFRCT A2	Cooling Tower System	none
CASP B		
RMRHSB	wet coal	OR-B-01-DC1105
RMRHSB	wet coal	OR-B-01-DC2105
RMRHSB	dry coal bin	OR-B-02-DC1070
RMRHSB	dry coal bin	OR-B-02-DC2070
RMRHSB	dry coal bin	OR-B-02-DC3070
RMRHSB	dry coal bin	OR-B-02-DC4070
RMRHSB	dry coal bin	OR-B-02-DC5070
CDB1	coal dryer	OR-B-01-CY1305 OR-B-01-DC1205
CDB2	coal dryer	OR-B-01-CY2305 OR-B-01-DC2205
CCB1	coal crusher	OR-B-02-DC1105
CCB2	coal crusher	OR-B-02-DC2105
CBSBB	blend #1	OR-B-03-DC1105
CBSBB	blend #1 feed hopper	OR-B-04-DC1105
CBSBB	Carborec crusher	OR-B-05-DC1205
CBSBB	crushed blend #2	OR-B-05-DC1305
CBSBB	Carborec crusher	OR-B-05-DC1405
CBSBB	Carborec bin	OR-B-05-DC6070
CBSBB	blend #2 bin	OR-B-06-DC1405
CBSBB	green fines	OR-B-06-DC1205
LSB	lime bin	OR-B-12-DC1006
FERB1 & FERAB B1	Feed Enhancement Reactor 1 & FERB1 Afterburner (combined)	Scrubber(OR-B-09-SR-1015) Cyclone (OR-B-09-CY-1025) & Baghouse (OR-B-09-DC1030)
FERB2 & FERAB B2	Feed Enhancement Reactor 2 & FERB2 Afterburner (combined)	Scrubber(OR-B-09-SR-2015) Cyclone (OR-B-09-CY-2025) & Baghouse (OR-B-09-DC2030)
FERB3 & FERAB B3	Feed Enhancement Reactor 3 & FERB3 Afterburner (combined)	Spray Dryer (OR-B-09-SR-3015) Cyclone (OR-B-09-CY-3025) & Baghouse (OR-B-09-DC3030)
FERB4 & FERAB B4	Feed Enhancement Reactor 4 & FERB4 Afterburner (combined)	Spray Dryer (OR-B-09-SR-4015) Cyclone (OR-B-09-CY-4025) & Baghouse (OR-B-09-DC4030)
PFRB1 & PFRAB B1	Particle Fusion Reactor 1 & PFRB1 Afterburner (combined)	Spray Dryer (OR-B-10-SR-1010) Cyclone (OR-B-10-CY-1115) & Baghouse (OR-B-10-DC1020)

Unit ID	Facility	Control Device (ID)
PFRB2 & PFRAB B2	Particle Fusion Reactor 2 & PFRB2 Afterburner (combined)	Spray Dryer (OR-B-10-SR-2010) Cyclone (OR-B-10-CY-2115) & Baghouse (OR-B-10-DC2020)
EGB1	Diesel-Fired Emergency Generator	none
EGB2	Diesel-Fired Emergency Generator	none
EGB3	NG-Fired Emergency Generator	none
FPB	Diesel-Fired Fire Pump	none
PFRCT B1	Cooling Tower System	none
PFRCT B2	Cooling Tower System	none
CASP C		
RMRHSC	wet coal	OR-C-01-DC1105
RMRHSC	wet coal	OR-C-01-DC2105
RMRHSC	dry coal bin	OR-C-02-DC1070
RMRHSC	dry coal bin	OR-C-02-DC2070
RMRHSC	dry coal bin	OR-C-02-DC3070
RMRHSC	dry coal bin	OR-C-02-DC4070
RMRHSC	dry coal bin	OR-C-02-DC5070
CDC1	coal dryer	OR-C-01-CY1305 OR-C-01-DC1205
CDC2	coal dryer	OR-C-01-CY2305 OR-C-01-DC2205
CCC1	coal crusher	OR-C-02-DC1105
CCC2	coal crusher	OR-C-02-DC2105
CBSBC	blend #1	OR-C-03-DC1105
CBSBC	blend #1 feed hopper	OR-C-04-DC1105
CBSBC	Carborec crusher	OR-C-05-DC1205
CBSBC	crushed blend #2	OR-C-05-DC1305
CBSBC	Carborec crusher	OR-C-05-DC1405
CBSBC	Carborec bin	OR-C-05-DC6070
CBSBC	blend #2 bin	OR-C-06-DC1405
CBSBC	green fines	OR-C-06-DC1205
LSC	lime bin	OR-C-12-DC1006
FERC1 & FERAB C1	Feed Enhancement Reactor 1 & FERC1 Afterburner (combined)	Spray Dryer (OR-C-09-SR-1015) Cyclone (OR-C-09-CY-1025) & Baghouse (OR-C-09-DC1030)
FERC2 & FERAB C2	Feed Enhancement Reactor 2 & FERC2 Afterburner (combined)	Spray Dryer (OR-C-09-SR-2015) Cyclone (OR-C-09-CY-2025) & Baghouse (OR-C-09-DC2030)
FERC3 & FERAB C3	Feed Enhancement Reactor 3 & FERC3 Afterburner (combined)	Spray Dryer (OR-C-09-SR-3015) Cyclone (OR-C-09-CY-3025) & Baghouse (OR-C-09-DC3030)
FERC4 & FERAB C4	Feed Enhancement Reactor 4 & FERC4 Afterburner (combined)	Spray Dryer (OR-C-09-SR-4015) Cyclone (OR-C-09-CY-4025) & Baghouse (OR-C-09-DC4030)
PFRC1 & PFRAB C1	Particle Fusion Reactor 1 & PFRC1 Afterburner (combined)	Spray Dryer (OR-C-10-SR-1010) Cyclone (OR-C-10-CY-1115) & Baghouse (OR-C-10-DC1020)
PFRC2 & PFRAB C2	Particle Fusion Reactor 2 & PFRC2 Afterburner (combined)	Spray Dryer (OR-C-10-SR-2010) Cyclone (OR-C-10-CY-2115) & Baghouse (OR-C-10-DC2020)

Unit ID	Facility	Control Device (ID)
EGC1	Diesel-Fired Emergency Generator	none
EGC2	Diesel-Fired Emergency Generator	none
EGC3	NG-Fired Emergency Generator	none
FPC	Diesel-Fired Fire Pump	none
PFRCT C1	Cooling Tower System	none
PFRCT C2	Cooling Tower System	none
CASP D		
RMRHSD	wet coal	OR-D-01-DC1105
RMRHSD	wet coal	OR-D-01-DC2105
RMRHSD	dry coal bin	OR-D-02-DC1070
RMRHSD	dry coal bin	OR-D-02-DC2070
RMRHSD	dry coal bin	OR-D-02-DC3070
RMRHSD	dry coal bin	OR-D-02-DC4070
RMRHSD	dry coal bin	OR-D-02-DC5070
CDD1	coal dryer	OR-D-01-CY1305 OR-D-01-DC1205
CDD2	coal dryer	OR-D-01-CY2305 OR-D-01-DC2205
CCD1	coal crusher	OR-D-02-DC1105
CCD2	coal crusher	OR-D-02-DC2105
CBSBD	blend #1	OR-D-03-DC1105
CBSBD	blend #1 feed hopper	OR-D-04-DC1105
CBSBD	Carborec crusher	OR-D-05-DC1205
CBSBD	crushed blend #2	OR-D-05-DC1305
CBSBD	Carborec crusher	OR-D-05-DC1405
CBSBD	Carborec bin	OR-D-05-DC6070
CBSBD	blend #2 bin	OR-D-06-DC1405
CBSBD	green fines	OR-D-06-DC1205
LSD	lime bin	OR-D-12-DC1006
FERD1 & FERAB D1	Feed Enhancement Reactor 1 & FERD1 Afterburner (combined)	Spray Dryer (OR-D-09-SR-1015) Cyclone (OR-D-09-CY-1025) & Baghouse (OR-D-09-DC1030)
FERD2 & FERAB D2	Feed Enhancement Reactor 2 & FERD2 Afterburner (combined)	Spray Dryer (OR-D-09-SR-2015) Cyclone (OR-D-09-CY-2025) & Baghouse (OR-D-09-DC2030)
FERD3 & FERAB D3	Feed Enhancement Reactor 3 & FERD3 Afterburner (combined)	Spray Dryer (OR-D-09-SR-3015) Cyclone (OR-D-09-CY-3025) & Baghouse (OR-D-09-DC3030)
FERD4 & FERAB D4	Feed Enhancement Reactor 4 & FERD4 Afterburner (combined)	Spray Dryer (OR-D-09-SR-4015) Cyclone (OR-D-09-CY-4025) & Baghouse (OR-D-09-DC4030)
PFRD1 & PFRAB D1	Particle Fusion Reactor 1 & PFRD1 Afterburner (combined)	Spray Dryer (OR-D-10-SR-1010) Cyclone (OR-D-10-CY-1115) & Baghouse (OR-D-10-DC1020)
PFRD2 & PFRAB D2	Particle Fusion Reactor 2 & PFRD2 Afterburner (combined)	Spray Dryer (OR-D-10-SR-2010) Cyclone (OR-D-10-CY-2115) & Baghouse (OR-D-10-DC2020)
EGD1	Diesel-Fired Emergency Generator	none
EGD2	Diesel-Fired Emergency Generator	none
EGD3	NG-Fired Emergency Generator	none

Unit ID	Facility	Control Device (ID)
FPD	Diesel-Fired Fire Pump	none
PFRCT D1	Cooling Tower System	none
PFRCT D2	Cooling Tower System	none

In order to comply with 326 IAC 6.8-1-2(a), the control devices shall be in operation and controlling emissions from the associated facility at all times the facilities are in operation.

326 IAC 6.8-2 (Lake County: PM10 Emission Requirements)
Pursuant to 326 IAC 6.8-2-1(a) the requirements of 326 IAC 6.8-2 through 326 IAC 6.8-8 apply to the sources, facilities, and operations in Lake County listed in 326 IAC 6.8-2-3 through 326 IAC 6.8-2-38. None of the facilities associated with this permitting action are specifically listed in 326 IAC 6.8-2-3 through 326 IAC 6.8-2-38. Therefore, the requirements of 326 IAC 6.8-2 though 326 IAC 6.8-8 do not apply to this modification.

326 IAC 6.8-9 (Lake County: PM10 Coke Battery Emission Requirements)
Pursuant to 326 IAC 1-2-16, a coke oven battery is any series of jointly operated slot type coke ovens, the operation of which results in the destructive distillation of coal for conversion to coke. Neither the Feed Enhancement Reactors nor the Particle Fusion Reactors consist of a series of jointly operated ovens. See Federal Rule Applicablity Determination Section for NESHAP, 40 CFR 63, Subpart L of this document for a detailed description of a Feed Enchancement Reactor and Particle Fusion Reactor. The requirements of 326 IAC 6.8-9 are not included in this permit modification for the FERs and PFRs.

326 IAC 6.8-10-1 (Lake County: Fugitive Particulate Matter)
Pursuant to 326 IAC 6.8-10-1(a)(2)(V), the requirements of 326 IAC 6.8-10 apply to this source.

Pursuant to 326 IAC 6.8-10-3 (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

(a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).

(b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).

(c) The opacity of fugitive particulate emissions from exposed areas shall not exceed ten percent (10%) on a six (6) minute average.

(d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.

(e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

(f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.

(g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).

(h) Material processing facilities shall include the following:

(1) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.

(2) The PM10 emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(3) The PM_{10} stack emissions from a material processing facility shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(4) The opacity of fugitive particulate emissions from the material processing facilities, except crusher at which a capture system is not used, shall not exceed ten percent (10%) opacity.

(5) The opacity of fugitive particulate emission from a crusher at which a capture system is not used shall not exceed fifteen percent (15%).

(i) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

(j) Material transfer limits shall be as follows:

(1) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

(2) Where adequate wetting of the material for fugitive particulate emissions control is prohibitive to further processing or reuse of the material, the opacity shall not exceed ten percent (10%), three (3) minute average.

(3) Slag and kish handling activities at integrated iron and steel plants shall comply with the following particulate emissions limits:

(A) The opacity of fugitive particulate emissions from transfer from pots and trucks into pits shall not exceed twenty percent (20%) on a six (6) minute average.

(B) The opacity of fugitive particulate emissions from transfer from pits into front end loaders and from transfer from front end loaders into trucks shall comply with the fugitive particulate emission limits in 326 IAC 6.8-10-3(9).

(k) Any facility or operation not specified in 326 IAC 6.8-10-3 shall meet a twenty percent (20%), three (3) minute average opacity standard.

326 IAC 6.8-10-4 (Lake County Fugitive Particulate Matter Control Requirements)
Pursuant to 326 IAC 6.8-10-4 (1) (Lake County Fugitive Particulate Matter Control Requirements), the source shall submit a control plan that, when fully implemented, will achieve compliance with the applicable emission limitations stated in section 3 of this rule (326 IAC 6.8-10-3). U.S. Steel submitted a revised Fugitive Dust Control Plan (FDCP) on March 1, 2003 (See Attachment A). If it is determined that the control procedures specified in the FDCP do not demonstrate compliance with the fugitive emission limitations, IDEM, OAQ may request that the FDCP be revised and submitted for approval.

326 IAC 7 (Sulfur Dioxide Emission Limitations)
None of the proposed fuel combustion facilities combust coal, residual oil, or distillation oil. Therefore, the requirements of 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations), 326 IAC 7-2 (Sulfur Dioxide Emission Limitations: Compliance), and 326 IAC 7-3 (Sulfur Dioxide Emission Limitations: Ambient Monitoring) do not apply.

326 IAC 7-4.1-20 (U.S. Steel-Gary Works Sulfur Dioxide Emission Limitations)
None of the proposed facilities are specifically listed in 326 IAC 7-4.1-20. Therefore, the requirements of 326 IAC 7-4.1 do not apply to this modification.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements for VOCs)
Pursuant to 326 IAC 8-1-6, new facilities (as of January 1, 1980) that have potential emissions, prior to controls, of twenty-five (25) tons or more per year of VOC and are not otherwise regulated by other provision of 326 IAC 8 shall reduce VOC emissions using BACT (Best Available Control Technology).

Each Feed Enhancement Reactor (FER) is equipped with an afterburner which combusts the VOC laden process gases. The afterburners have been determined to be integral to the FER process and are not considered control devices. Each Particle Fusion Reactor (PFR) is designed to combust the process gases within the tunnel kiln, reducing the VOC content of the exhausting gas stream. The PFR afterburners are designed for heat recovery not reduction of VOC. Therefore, the VOC emissions from each FER and PFR stack exhaust are considered when determining BACT applicability. The potential emissions of VOC from each individual FER and PFR are less than twenty-five (25) tons per year. The potential emissions of VOC from each CASP, resulting from the combination of four (4) FERs and two (2) PFRs per CASP, are less than twenty-five (25) tons per year.

Therefore, the requirement of 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) does not apply to the Carbon Alloy Synthesis Project (CASP).

326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)
Pursuant to 326 IAC 8-4-3(a), this rule applies to all petroleum liquid storage vessels with capacities greater than one hundred fifty thousand (150,000) liters (39,000 gallons) containing volatile organic compounds whose true vapor pressure is greater than 10.5 kPa (1.52 psi). The diesel storage tanks each have storage capacities of less than 39,000 gallons. Therefore, the requirements of 326 IAC 8-4-3 do not apply to the diesel storage tanks.

326 IAC 8-7-3 (Specific VOC Reduction Requirements For Lake/Porter/Clark/Floyd Counties)

(a) Pursuant to 326 IAC 8-7-2(b) fuel combustion facilities, including process heaters, are exempt for the emission limit requirements of 326 IAC 8-7-3. Under 40 CFR 60, Subpart Dc, the Feed Enhancement Reactors (FER) and Particle Fusion Reactors (PFR) are considered process heaters. Therefore, the requirements of 326 IAC 8-7-3 do not apply to the FERs and PFRs.

(b) Pursuant to 326 IAC 8-7-2(a)(3)(Q) volatile organic liquids storage is not an affected facility under 326 IAC 8-7. Therefore, the requirements of 326 IAC 8-7 do not apply to the diesel storage tanks or the coal tar tanks.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)
Pursuant to 326 IAC 8-9-1, stationary vessels located in Lake County with a capacity of less than thirty-nine thousand (39,000) gallons are subject to the reporting and recordkeeping provision of section 6(a) and 6(b) of 326 IAC 8-9 and are exempt from all other provisions of this rule. Therefore, the source will comply with the following:

(a) The Permittee shall maintain a record and submit to the department a report containing the following information for each of the coal tar tanks and diesel storage tanks:

(1) The vessel identification number.
(2) The vessel dimensions.
(3) The vessel capacity.

Records shall be maintained for the life of the vessel.

326 IAC 8-18 (Synthetic Organic Chemical Manufacturing Industry Air Oxidation, Distillation, and Reactor Processes)
The Feed Enhancement Reactors (FER) and Particle Fusion Reactors (PFR) do not produce any of the chemicals listed in Appendix A of Control of Volatile Organic Compound Emissions from Processes and Distillation Operations in Synthetic Organic Chemical Manufacturing Industry (SOCMI) for reactor and distillation CTG (EPA-450/4-91-031, August 1993). Therefore, the requirements of 326 IAC 8-18 do not apply to the FERs and PFRs.

326 IAC 8-19 (Control of Volatile Organic Compound Emissions from Process Vents in Batch Operations)
The Feed Enhancement Reactors (FER) and Particle Fusion Reactors (PFR) operate in a continuous process train. Therefore, the requirements of 326 IAC 8-19 are not applicable.

326 IAC 11-3-2 (Emission Limitations for Coke Oven Batteries)
Pursuant to 326 IAC 1-2-16, a coke oven battery is any series of jointly operated slot type coke ovens, the operation of which results in the destructive distillation of coal for conversion to coke. Neither the Feed Enhancement Reactors nor the Particle Fusion Reactors consist of a series of jointly operated ovens. See Federal Rule Applicablity Determination Section for NESHAP, 40 CFR 63, Subpart L of this document for a detailed description of a Feed Enchancement Reactor and Particle Fusion Reactor. Pursuant to 326 IAC 11-3-1, the requirements apply to coke oven batteries for which construction or modification commenced prior to June 19, 1979. Therefore, the requirements of 326 IAC 11-3-2 are not are not included in this permit modification for the FERs and PFRs.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Feed Enhancement Reactors (FER), including the Coal Tar Reclaimer systems, and Particle Fusion Reactors (PFR)

Compliance Determination Requirements

The Compliance Determination Requirements applicable to the FER facilities (FERA1, FERA2, FERB1, FERB2, FERC1, FERC2, FERD1, FERD2) and PFR facilities (PFRA1, PFRA2, PFRB1, PFRB2, PFRC1, PFRC2, PFRD1, PFRD2) are as follows:

(a) Testing Requirements

(1) Not later than 180 days after the startup of CASP A, compliance with emission limitations in Conditions D.18.1- Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10/NOx/SO2/CO, Emission Offset Minor Limit VOC, Nonattainment New Source Review (NSR) Minor Limit PM2.5 and D.18.2 - D.18.2- Particulate Emission Limitation, shall be determined by a performance stack test for PM, PM10, PM2.5, NOx, SO2, CO, and VOC for one (1) of the four (4) Feed Enhancement Reactors (FERA1, FERA2, FERA3, FERA4) and one (1) of the two (2) Particle Fusion Reactors (PFRA1, PFRA2) at least once every 2.5 years from the date of the most recent compliance demonstration.

Until such time that all Feed Enhancement Reactors (FERA1, FERA2, FERA3, FERA4) have been tested once, subsequent testing shall be conducted for a FER that has not yet demonstrated compliance. After such time that all Feed Enhancement Reactors (FERA1, FERA2, FERA3, FERA4) have been tested, testing shall be conducted for the FER with the longest lapse in time since the most recent compliance demonstration. Subsequent testing of the Particle Fusion Reactors (PFRA1, PFRA2) shall be conducted for the Particle Fusion Reactor not tested in the most recent compliance demonstration.

(2) Not later than 180 days after the startup of CASP B, compliance with emission limitations in Conditions D.18.1- Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10/NOx/SO2/CO, Emission Offset Minor Limit VOC, Nonattainment New Source Review (NSR) Minor Limit PM2.5 and D.18.2 - D.18.2- Particulate Emission Limitation, shall be determined by a performance stack test for PM, PM10, PM2.5, NOx, SO2, CO, and VOC for one (1) of the four (4) Feed Enhancement Reactors (FERB1, FERB2, FERB3, FERB4) and one (1) of the two (2) Particle Fusion Reactors (PFRB1, PFRB2) at least once every 2.5 years from the date of the most recent compliance demonstration.

Until such time that all Feed Enhancement Reactors (FERB1, FERB2, FERB3, FERB4) have been tested once, subsequent testing shall be conducted for a FER that has not yet demonstrated compliance. After such time that all Feed Enhancement Reactors (FERB1, FERB2, FERB3, FERB4) have been tested, testing shall be conducted for the FER with the longest lapse in time since the most recent compliance demonstration. Subsequent testing of the Particle Fusion Reactors (PFRB1, PFRB2) shall be conducted for the Particle Fusion Reactor not tested in the most recent compliance demonstration.

(3) Not later than 180 days after the startup of CASP C, compliance with emission limitations in Conditions D.18.1- Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10/NOx/SO2/CO, Emission Offset Minor Limit VOC, Nonattainment New Source Review (NSR) Minor Limit PM2.5 and D.18.2 - D.18.2- Particulate Emission Limitation, shall be determined by a performance stack test for PM, PM10, PM2.5, NOx, SO2, CO, and VOC for one (1) of the four (4) Feed Enhancement Reactors (FERC1, FERC2, FERC3, FERC4) and one (1)

of the two (2) Particle Fusion Reactors (PFRC1, PFRC2) at least once every 2.5 years from the date of the most recent compliance demonstration.

Until such time that all Feed Enhancement Reactors (FERC1, FERC2, FERC3, FERC4) have been tested once, subsequent testing shall be conducted for a FER that has not yet demonstrated compliance. After such time that all Feed Enhancement Reactors (FERC1, FERC2, FERC3, FERC4) have been tested, testing shall be conducted for the FER with the longest lapse in time since the most recent compliance demonstration. Subsequent testing of the Particle Fusion Reactors (PFRC1, PFRC2) shall be conducted for the Particle Fusion Reactor not tested in the most recent compliance demonstration.

(4) Not later than 180 days after the startup of CASP D, compliance with emission limitations in Conditions D.18.1- Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10/NOx/SO2/CO, Emission Offset Minor Limit VOC, Nonattainment New Source Review (NSR) Minor Limit PM2.5 and D.18.2 - D.18.2- Particulate Emission Limitation, shall be determined by a performance stack test for PM, PM10, PM2.5, NOx, SO2, CO, and VOC for one (1) of the four (4) Feed Enhancement Reactors (FERD1, FERD2, FERD3, FERD4) and one (1) of the two (2) Particle Fusion Reactors (PFRD1, PFRD2) at least once every 2.5 years from the date of the most recent compliance demonstration.

Until such time that all Feed Enhancement Reactors (FERD1, FERD2, FERD3, FERD4) have been tested once, subsequent testing shall be conducted for a FER that has not yet demonstrated compliance. After such time that all Feed Enhancement Reactors (FERD1, FERD2, FERD3, FERD4) have been tested, testing shall be conducted for the FER with the longest lapse in time since the most recent compliance demonstration. Subsequent testing of the Particle Fusion Reactors (PFRD1, PFRD2) shall be conducted for the Particle Fusion Reactor not tested in the most recent compliance demonstration.

(5) In lieu of performing the initial compliance tests for PM10 and PM2.5 in accordance with the schedules set forth in Condition D.18.7 (a) through (e), should the new or revised condensable PM test method(s) referenced in U.S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5) signed on May 8, 2008, fail to be published at the time of the required testing, the Permittee may elect to test not later than 180 days after publication of the new or revised condensable PM test method(s) referenced in U.S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5) signed on May 8, 2008. Subsequent testing for PM10 and PM2.5 shall not be effected by this condition (D.18.7(e)) and shall be performed in accordance with Condition D.18.7 (a) through (e).

(b) Emission Control Operation

(1) The baghouse and cyclone associated with each FER and PFR shall be in operation and controlling particulate at all times when its associated facility/emissions unit is in operation.

(2) The spray scrubber associated with each FER and PFR shall be in operation at all times and control emissions when its associated facility/emissions unit is in operation.

(3) The Feed Enhancement Reactor afterburners associated with each FER shall be in operation and combusting the process emissions at all times when the associated Feed Enhancement Reactor is in operation.

(4) The Particle Fusion Reactor afterburners associated with each PFR shall be in operation and control VOC emissions at all times when the associated Particle Fusion Reactor is in operation.

(5) The spray scrubber associated with each FER shall be in operation and capturing emissions from its associated FER at all time the associated FER is in operation.

(6) The PFR fans exhausting to the afterburners shall be in operation and capturing emissions from its associated PFR at all time the associated PFR is in operation.

These requirements are required to ensure compliance with 326 IAC 6.8-1-2(a) (Particulate Emission Limitation) and to render the requirements of 326 IAC 2-2 (PSD), 326 IAC 2-3 (Emission Offset) and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable to the Carbon Alloy Synthesis Plant (CASP) project.

Compliance Monitoring Requirements

The Compliance Monitoring Requirements applicable to the FER facilities (FERA1, FERA2, FERB1, FERB2, FERC1, FERC2, FERD1, FERD2) and PFR facilities (PFRA1, PFRA2, PFRB1, PFRB2, PFRC1, PFRC2, PFRD1, PFRD2) are as follows:

(a) FER and PFR Afterburner Temperature Monitoring
A continuous monitoring system shall be calibrated, maintained, and operated on the Feed Enhancement Reactor afterburners (FERAB A1, FERAB A2, FERAB B1, FERAB B2, FERAB C1, FERAB C2, FERAB D1, and FERAB D2) and the Particle Fusion Reactor afterburners (PFRAB A1, PFRAB A2, PFRAB B1, PFRAB B2, PFRAB C1, PFRAB C2, PFRAB D1, and PFRAB D2) for measuring operating temperature.

(b) Coal Tar Reclaimer Temperature Monitoring
A continuous monitoring system shall be calibrated, maintained, and operated on each of the coal tar reclaimer system listed in this section for measuring outlet exhaust temperature of each reformer.

(c) Scrubber Monitoring
The Permittee shall monitor the pH of the scrubbing liquid, exhaust air stream pressure drop, and pump discharge pressure of all spray scrubbers associated with each FER (FERA1, FERA2, FERB1, FERB2, FERC1, FERC2, FERD1, FERD2) and each PFR (PFRA1, PFRA2, PFRB1, PFRB2, PFRC1, PFRC2, PFRD1, PFRD2) at least once per day when the spray tower absorber is in operation.

(d) Visible Emissions Notations
Visible emission notations of all the baghouse stack exhausts associated with each FER (FERA1, FERA2, FERB1, FERB2, FERC1, FERC2, FERD1, FERD2) and each PFR (PFRA1, PFRA2, PFRB1, PFRB2, PFRC1, PFRC2, PFRD1, PFRD2) shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, at least eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(e) Parametric Monitoring Notations
The Permittee shall record the pressure drop across each baghouse and cyclone associated with each FER (FERA1, FERA2, FERB1, FERB2, FERC1, FERC2, FERD1, FERD2) and each PFR (PFRA1, PFRA2, PFRB1, PFRB2, PFRC1, PFRC2, PFRD1, PFRD2), at least once per day when the associated facility/emissions unit is in operation.

(f) Broken or Failed Bag Detection
For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later that the completion of the processing of the material in the line or emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(g) Cyclone Failure Detection
In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

These monitoring conditions are necessary because each baghouse, cyclone, and scrubber, and coal tar reclaimer system must operate properly to ensure compliance with 326 IAC 6.8-1-2(a) (Particulate Emission Limitation) and 326 IAC 2-7 (Part 70)) and to render the requirements of 326 IAC 2-2 (PSD), 326 IAC 2-3 (Emission Offset) and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable to the Carbon Alloy Synthesis Plant (CASP) project.

Emission Units Associated with the Carbon Alloy Synthesis Plant (CASP) Project equipped with a baghouse as follows:

Facilities Equipped with Baghouses as part of CASP Project	Stack ID
coal dryer and associated dried coal conveyors (CDA1)	OR-A-01-ST1215
coal crusher and associated crushed coal conveyors (CCA1)	OR-A-02-ST1105
coal dryer and associated dried coal conveyors (CDA2)	OR-A-01-ST2215
coal crusher and associated crushed coal conveyors (CCA2)	OR-A-02-ST2105
lime storage silo (LSA)	OR-A-12-ST1006
coal dryer and associated dried coal conveyors (CDB1)	OR-B-01-ST1215
coal crusher and associated crushed coal conveyors (CCB1)	OR-B-02-ST1105
coal dryer and associated dried coal conveyors (CDB2)	OR-B-01-ST2215
coal crusher and associated crushed coal conveyors (CCB2)	OR-B-02-ST2105
lime storage silo (LSB)	OR-B-12-ST1006
coal dryer and associated dried coal conveyors (CDC1)	OR-C-01-ST1215
coal crusher and associated crushed coal conveyors (CCC1)	OR-C-02-ST1105

Facilities Equipped with Baghouses as part of CASP Project	Stack ID
coal dryer and associated dried coal conveyors (CDC2)	OR-C-01-ST2215
coal crusher and associated crushed coal conveyors (CCC2)	OR-C-02-ST2105
lime storage silo (LSC)	OR-C-12-ST1006
coal dryer and associated dried coal conveyors (CDD1)	OR-D-01-ST1215
coal crusher and associated crushed coal conveyors (CCD1)	OR-D-02-ST1105
coal dryer and associated dried coal conveyors (CDD2)	OR-D-01-ST2215
coal crusher and associated crushed coal conveyors (CCD2)	OR-D-02-ST2105
lime storage silo (LSD)	OR-D-12-ST1006
CASP A - RMRHSA	
CDA1 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-A-01-ST1105
CDA2 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-A-01-ST2105
dry coal storage silo	OR-A-02-ST1070
dry coal storage silo	OR-A-02-ST2070
dry coal storage silo	OR-A-02-ST3070
dry coal storage silo	OR-A-02-ST4070
dry coal storage silo	OR-A-02-ST5070
blend #1 weigh feeders and drag conveyor	OR-A-03-ST1105
blend #1 feed hoppers and blend #1 hopper feed drag conveyors	OR-A-04-ST1105
CASP A - CBSBA	
Carborec crusher feed drag conveyors	OR-A-05-ST1205
weigh feeders and blend #2 drag conveyors	OR-A-05-ST1405
Carborec storage silo	OR-A-05-ST6070
blend #2 surge bin	OR-A-06-ST1405
blend #2 weigh feeders, blend #2 drag conveyors, blend #2 crushers, hi-intensive mixers, pug mills, densifers, billet belt conveyors, billet roller screener, and billet fines weigh feeder	OR-A-06-ST1205
CASP B - RMRHSB	
CDB1 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-B-01-ST1105
CDB2 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-B-01-ST2105
dry coal storage silo	OR-B-02-ST1070
dry coal storage silo	OR-B-02-ST2070
dry coal storage silo	OR-B-02-ST3070
dry coal storage silo	OR-B-02-ST4070
dry coal storage silo	OR-B-02-ST5070
blend #1 weigh feeders and drag conveyor	OR-B-03-ST1105
blend #1 feed hoppers and blend #1 hopper feed drag conveyors	OR-B-04-ST1105
CASP B - CBSBB	
Carborec crusher feed drag conveyors	OR-B-05-ST1205
weigh feeders and blend #2 drag conveyors	OR-B-05-ST1405
Carborec storage silo	OR-B-05-ST6070
blend #2 surge bin	OR-B-06-ST1405

Facilities Equipped with Baghouses as part of CASP Project	Stack ID
blend #2 weigh feeders, blend #2 drag conveyors, blend #2 crushers, hi-intensive mixers, pug mills, densifers, billet belt conveyors, billet roller screener, and billet fines weigh feeder	OR-B-06-ST1205
CASP C - RMRHSC	
CDC1 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-C-01-ST1105
CDC2 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-C-01-ST2105
dry coal storage silo	OR-C-02-ST1070
dry coal storage silo	OR-C-02-ST2070
dry coal storage silo	OR-C-02-ST3070
dry coal storage silo	OR-C-02-ST4070
dry coal storage silo	OR-C-02-ST5070
blend #1 weigh feeders and drag conveyor	OR-C-03-ST1105
blend #1 feed hoppers and blend #1 hopper feed drag conveyors	OR-C-04-ST1105
CASP C - CBSBC	
Carborec crusher feed drag conveyors	OR-C-05-ST1205
weigh feeders and blend #2 drag conveyors	OR-C-05-ST1405
Carborec storage silo	OR-C-05-ST6070
blend #2 surge bin	OR-C-06-ST1405
blend #2 weigh feeders, blend #2 drag conveyors, blend #2 crushers, hi-intensive mixers, pug mills, densifers, billet belt conveyors, billet roller screener, and billet fines weigh feeder	OR-C-06-ST1205
CASP D - RMRHSD	
CDD1 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-D-01-ST1105
CDD2 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-D-01-ST2105
dry coal storage silo	OR-D-02-ST1070
dry coal storage silo	OR-D-02-ST2070
dry coal storage silo	OR-D-02-ST3070
dry coal storage silo	OR-D-02-ST4070
dry coal storage silo	OR-D-02-ST5070
blend #1 weigh feeders and drag conveyor	OR-D-03-ST1105
blend #1 feed hoppers and blend #1 hopper feed drag conveyors	OR-D-04-ST1105
CASP D - CBSBD	
Carborec crusher feed drag conveyors	OR-D-05-ST1205
weigh feeders and blend #2 drag conveyors	OR-D-05-ST1405
Carborec storage silo	OR-D-05-ST6070
blend #2 surge bin	OR-D-06-ST1405
blend #2 weigh feeders, blend #2 drag conveyors, blend #2 crushers, hi-intensive mixers, pug mills, densifers, billet belt conveyors, billet roller screener, and billet fines weigh feeder	OR-D-06-ST1205

Compliance Determination Requirements

The Compliance Determination Requirements applicable to the "Facilities Equipped with Baghouses as part of CASP Project" are as follows:

(a) Testing Requirements

(1) Not later than 180 days after the startup of CASP A, compliance with emission limitations in Conditions D.19.1- Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10, Nonattainment New Source Review (NSR) Minor Limit PM2.5 and D.19.2 - Particulate Emission Limitation, shall be determined by a performance stack test for PM/PM10/PM2.5 of either the coal crusher and associated crushed coal conveyors, identified as CCA1, or the coal crusher and associated crushed coal conveyors, identified as CCA2, at least once every five (5) years from the date of the most recent compliance demonstration. Subsequent testing shall be conducted for the coal crusher and associated conveyors (CCA1 or CCA2) not tested in the most recent compliance demonstration.

(2) Not later than 180 days after the startup of CASP A, compliance with emission limitations in Conditions D.19.1- Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10, Nonattainment New Source Review (NSR) Minor Limit PM2.5 and D.19.2 - Particulate Emission Limitation, shall be determined by a performance stack test for PM/PM10/PM2.5 of either the coal dryer and associated dried coal conveyors, identified as CDA1, or the coal dryer and associated dried coal conveyors, identified as CDA2, at least once every five (5) years from the date of the most recent compliance demonstration. Subsequent testing shall be conducted for the coal crusher and associated conveyors (CDA1 or CDA2) not tested in the most recent compliance demonstration.

(3) Not later than 180 days after the startup of CASP A, compliance with emission limitations in Conditions D.19.1- Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10, Nonattainment New Source Review (NSR) Minor Limit PM2.5 and D.19.2 - Particulate Emission Limitation, shall be determined by a performance stack test for PM/PM10/PM2.5 of one (1) of the five (5) dry coal bins, identified under RMRHSA, at least once every five (5) years from the date of the most recent compliance demonstration. Until such time that all five (5) dry coal bins have been tested once, subsequent testing shall be conducted for a dry coal bin that has not yet demonstrated compliance. After such time that all five (5) dry coal bins have been tested, testing shall be conducted for the dry coal bin with the longest lapse in time since the most recent compliance demonstration.

(4) Not later than 180 days after the startup of CASP A, compliance with emission limitations in Conditions D.19.1- Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10, Nonattainment New Source Review (NSR) Minor Limit PM2.5 and D.19.2 - Particulate Emission Limitation, shall be determined by a performance stack test for PM/PM10/PM2.5 of the three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, identified under CBSBA, at least once every five (5) years from the date of the most recent compliance demonstration.

(5) Not later than 180 days after the startup of CASP B, compliance with emission limitations in Conditions D.19.1- Prevention of Significant Deterioration (PSD)

Minor Limit PM/PM10, Nonattainment New Source Review (NSR) Minor Limit PM2.5 and D.19.2 - Particulate Emission Limitation, shall be determined by a performance stack test for PM/PM10/PM2.5 of either the coal crusher and associated crushed coal conveyors, identified as CCB1, or the coal crusher and associated crushed coal conveyors, identified as CCB2, at least once every five (5) years from the date of the most recent compliance demonstration. Subsequent testing shall be conducted for the coal crusher and associated conveyors (CCB1 or CCB2) not tested in the most recent compliance demonstration.

(6) Not later than 180 days after the startup of CASP B, compliance with emission limitations in Conditions D.19.1- Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10, Nonattainment New Source Review (NSR) Minor Limit PM2.5 and D.19.2 - Particulate Emission Limitation, shall be determined by a performance stack test for PM/PM10/PM2.5 of either the coal dryer and associated dried coal conveyors, identified as CDB1, or the coal dryer and associated dried coal conveyors, identified as CDB2, at least once every five (5) years from the date of the most recent compliance demonstration. Subsequent testing shall be conducted for the coal crusher and associated conveyors (CDB1 or CDB2) not tested in the most recent compliance demonstration.

(7) Not later than 180 days after the startup of CASP B, compliance with emission limitations in Conditions D.19.1- Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10, Nonattainment New Source Review (NSR) Minor Limit PM2.5 and D.19.2 - Particulate Emission Limitation, shall be determined by a performance stack test for PM/PM10/PM2.5 of one (1) of the five (5) dry coal bins, identified under RMRHSB, at least once every five (5) years from the date of the most recent compliance demonstration. Until such time that all five (5) dry coal bins have been tested once, subsequent testing shall be conducted for a dry coal bin that has not yet demonstrated compliance. After such time that all five (5) dry coal bins have been tested, testing shall be conducted for the dry coal bin with the longest lapse in time since the most recent compliance demonstration.

(8) Not later than 180 days after the startup of CASP B, compliance with emission limitations in Conditions D.19.1- Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10, Nonattainment New Source Review (NSR) Minor Limit PM2.5 and D.19.2 - Particulate Emission Limitation, shall be determined by a performance stack test for PM/PM10/PM2.5 of the three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, identified under CBSBB, at least once every five (5) years from the date of the most recent compliance demonstration.

(9) Not later than 180 days after the startup of CASP C, compliance with emission limitations in Conditions D.19.1- Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10, Nonattainment New Source Review (NSR) Minor Limit PM2.5 and D.19.2 - Particulate Emission Limitation, shall be determined by a performance stack test for PM/PM10/PM2.5 of either the coal crusher and associated crushed coal conveyors, identified as CCC1, or the coal crusher and associated crushed coal conveyors, identified as CCC2, at least once every five (5) years from the date of the most recent compliance demonstration. Subsequent testing shall be conducted for the coal crusher and associated conveyors (CCC1 or CCC2) not tested in the most recent compliance demonstration.

(10) Not later than 180 days after the startup of CASP C, compliance with emission limitations in Conditions D.19.1- Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10, Nonattainment New Source Review (NSR) Minor Limit PM2.5 and D.19.2 - Particulate Emission Limitation, shall be determined by a performance stack test for PM/PM10/PM2.5 of either the coal dryer and associated dried coal conveyors, identified as CDC1, or the coal dryer and associated dried coal conveyors, identified as CDC2, at least once every five (5) years from the date of the most recent compliance demonstration. Subsequent testing shall be conducted for the coal crusher and associated conveyors (CDC1 or CDC2) not tested in the most recent compliance demonstration.

(11) Not later than 180 days after the startup of CASP C, compliance with emission limitations in Conditions D.19.1- Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10, Nonattainment New Source Review (NSR) Minor Limit PM2.5 and D.19.2 - Particulate Emission Limitation, shall be determined by a performance stack test for PM/PM10/PM2.5 of one (1) of the five (5) dry coal bins, identified under RMRHSC, at least once every five (5) years from the date of the most recent compliance demonstration. Until such time that all five (5) dry coal bins have been tested once, subsequent testing shall be conducted for a dry coal bin that has not yet demonstrated compliance. After such time that all five (5) dry coal bins have been tested, testing shall be conducted for the dry coal bin with the longest lapse in time since the most recent compliance demonstration.

(12) Not later than 180 days after the startup of CASP C, compliance with emission limitations in Conditions D.19.1- Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10, Nonattainment New Source Review (NSR) Minor Limit PM2.5 and D.19.2 - Particulate Emission Limitation, shall be determined by a performance stack test for PM/PM10/PM2.5 of the three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, identified under CBSBC, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

(13) Not later than 180 days after the startup of CASP D, compliance with emission limitations in Conditions D.19.1- Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10, Nonattainment New Source Review (NSR) Minor Limit PM2.5 and D.19.2 - Particulate Emission Limitation, shall be determined by a performance stack test for PM/PM10/PM2.5 of either the coal crusher and associated crushed coal conveyors, identified as CCD1, or the coal crusher and associated crushed coal conveyors, identified as CCD2, at least once every five (5) years from the date of the most recent compliance demonstration. Subsequent testing shall be conducted for the coal crusher and associated conveyors (CCD1 or CCD2) not tested in the most recent compliance demonstration.

(14) Not later than 180 days after the startup of CASP D, compliance with emission limitations in Conditions D.19.1- Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10, Nonattainment New Source Review (NSR) Minor Limit PM2.5 and D.19.2 - Particulate Emission Limitation, shall be determined by a performance stack test for PM/PM10/PM2.5 of either the coal dryer and associated dried coal conveyors, identified as CDD1, or the coal dryer and associated dried coal conveyors, identified as CDD2, at least once every five (5) years from the date of the most recent compliance demonstration. Subsequent

testing shall be conducted for the coal crusher and associated conveyors (CDD1 or CDD2) not tested in the most recent compliance demonstration.

(15) Not later than 180 days after the startup of CASP D, compliance with emission limitations in Conditions D.19.1- Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10, Nonattainment New Source Review (NSR) Minor Limit PM2.5 and D.19.2 - Particulate Emission Limitation, shall be determined by a performance stack test for PM/PM10/PM2.5 of one (1) of the five (5) dry coal bins, identified under RMRHSD, at least once every five (5) years from the date of the most recent compliance demonstration. Until such time that all five (5) dry coal bins have been tested once, subsequent testing shall be conducted for a dry coal bin that has not yet demonstrated compliance. After such time that all five (5) dry coal bins have been tested, testing shall be conducted for the dry coal bin with the longest lapse in time since the most recent compliance demonstration.

(16) Not later than 180 days after the startup of CASP D, compliance with emission limitations in Conditions D.19.1- Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10, Nonattainment New Source Review (NSR) Minor Limit PM2.5 and D.19.2 - Particulate Emission Limitation, shall be determined by a performance stack test for PM/PM10/PM2.5 of the three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, identified under CBSBD, at least once every five (5) years from the date of the most recent compliance demonstration.

(17) In lieu of performing the initial compliance tests for PM10 and PM2.5 in accordance with the schedules set forth in Condition D.19.5 (a) through (p), should the new or revised condensable PM test method(s) referenced in U.S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5) signed on May 8, 2008, fail to be published at the time of the required testing , the Permittee may elect to test not later than 180 days after publication of the new or revised condensable PM test method(s) referenced in U.S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5) signed on May 8, 2008. Subsequent testing for PM10 and PM2.5 shall not be effected by this condition (D.19.5(q)) and shall be performed in accordance with Condition D.19.5 (a) through (p).

(b) Emission Control Operation

(1) The baghouse associated with each "Facilities Equipped with Baghouses as part of CASP Project" shall be in operation and controlling particulate at all times when its associated facility/emissions unit is in operation.

These requirements are required to ensure compliance with 326 IAC 6.8-1-2(a) (Particulate Emission Limitation) and to render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable to the Carbon Alloy Synthesis Plant (CASP) project.

Compliance Monitoring Requirements

The Compliance Monitoring Requirements applicable to the "Facilities Equipped with Baghouses as part of CASP Project" are as follows:

(a) Visible Emissions Notations
Visible emission notations of all the baghouse stack exhausts associated with each of the "Facilities Equipped with Baghouses as part of CASP Project" shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, at least eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(b) Parametric Monitoring Notations
The Permittee shall record the pressure drop across each baghouse associated with each of the "Facilities Equipped with Baghouses as part of CASP Project" at least once per day when the associated facility/emissions unit is in operation.

(c) Broken or Failed Bag Detection
For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later that the completion of the processing of the material in the line or emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

These monitoring conditions are necessary because each baghouse must operate properly to ensure compliance with 326 IAC 6.8-1-2(a) (Particulate Emission Limitation) and 326 IAC 2-7 (Part 70)) and to render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable to the Carbon Alloy Synthesis Plant (CASP) project.

Emission Units Associated with the Carbon Alloy Synthesis Plant (CASP) Project with Particulate Emissions Uncontrolled as Follows:

CASP A

(l) One (1) billet transfer area, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-A-06-HP1125.
(2) Three (3) billet fines open belt conveyors, identified as OR-A-06-CB1130, OR-A-06-CB1140, and OR-A-06- CB 1145.
(3) One (1) billet belt conveyor, identified as OR-A-06-CB1110.
(4) One (1) billet hopper, identified as OR-A-06-HP1115.
(5) Four (4) billet belt conveyors, identified as OR-A-06-CB1120, OR-A-06-CB2120, OR-A-06-CB1126, and OR-A-06-CB2126.
(6) Two (2) billet vibratory feeders, identified as OR-A-06-VF1125 and OR-A-06-VF2125.
(7) Two (2) trolley car loading stations, collectively identified as OR-A-06-LD1128.
(8) One (1) billet hopper, identified as OR-A-06-HP1135, and five (5) belt conveyors, identified as OR-A-06-CB1150, OR-A-06-CB1160, OR-A-06-CB1170, OR-A-06-CB1180, and OR-A-06-CB1190.

(o) One (1) Finish Product Handling and Loading process, approved for construction in 2010,

with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-A-08-CB1020, OR-A-08-CB1030, OR-A-08-CB2020, and OR-A-08-CB2030.
(2) One (1) Cokonyx belt conveyor, identified as OR-A-08-CD1035.

CASP B

(l) One (1) billet transfer area, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-B-06-HP1125.
(2) Three (3) billet fines open belt conveyors, identified as OR-B-06- CB 1130, OR-B-06- CB 1140, and OR-B-06- CB 1145.
(3) One (1) billet belt conveyor, identified as OR-B-06-CB1110.
(4) One (1) billet hopper, identified as OR-B-06-HP1115.
(5) Four (4) billet belt conveyors, identified as OR-B-06-CB1120, OR-B-06-CB2120, OR-B-06-CB1126, and OR-B-06-CB2126.
(6) Two (2) billet vibratory feeders, identified as OR-B-06-VF1125 and OR-B-06-VF2125.
(7) Two (2) trolley car loading stations, collectively identified as OR-B-06-LD1128.
(8) One (1) billet hopper, identified as OR-B-06-HP1135, and five (5) belt conveyors, identified as OR-B-06-CB1150, OR-B-06-CB1160, OR-B-06-CB1170, OR-B-06-CB1180, and OR-B-06-CB1190.

(o) One (1) Finish Product Handling and Loading process, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-B-08-CB1020, OR-B-08-CB1030, OR-B-08-CB2020, and OR-B-08-CB2030.
(2) One (1) Cokonyx belt conveyor, identified as OR-B-08-CD1035.

CASP C

(l) One (1) billet transfer area, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-C-06-HP1125.
(2) Three (3) billet fines open belt conveyors, identified as OR-C-06- CB 1130, OR-C-06- CB 1140, and OR-C-06- CB 1145.
(3) One (1) billet belt conveyor, identified as OR-C-06-CB1110.
(4) One (1) billet hopper, identified as OR-C-06-HP1115.
(5) Four (4) billet belt conveyors, identified as OR-C-06-CB1120, OR-C-06-CB2120, OR-C-06-CB1126, and OR-C-06-CB2126.
(6) Two (2) billet vibratory feeders, identified as OR-C-06-VF1125 and OR-C-06-VF2125.
(7) Two (2) trolley car loading stations, collectively identified as OR-C-06-LD1128.
(8) One (1) billet hopper, identified as OR-C-06-HP1135, and five (5) belt conveyors, identified as OR-C-06-CB1150, OR-C-06-CB1160, OR-C-06-CB1170, OR-C-06-CB1180, and OR-C-06-CB1190.

(o) One (1) Finish Product Handling and Loading process, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-C-08-CB1020, OR-C-08-CB1030, OR-C-08-CB2020, and OR-C-08-CB2030.
(2) One (1) Cokonyx belt conveyor, identified as OR-C-08-CD1035.

CASP D

(l) One (1) billet transfer area, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-D-06-HP1125.
(2) Three (3) billet fines open belt conveyors, identified as OR-D-06- CB 1130, OR-D-06- CB 1140, and OR-D-06- CB 1145.
(3) One (1) billet belt conveyor, identified as OR-D-06-CB1110.
(4) One (1) billet hopper, identified as OR-D-06-HP1115.
(5) Four (4) billet belt conveyors, identified as OR-D-06-CB1120, OR-D-06-CB2120, OR-D-06-CB1126, and OR-D-06-CB2126.
(6) Two (2) billet vibratory feeders, identified as OR-D-06-VF1125 and OR-D-06-VF2125.
(7) Two (2) trolley car loading stations, collectively identified as OR-D-06-LD1128.
(8) One (1) billet hopper, identified as OR-D-06-HP1135, and five (5) belt conveyors, identified as OR-D-06-CB1150, OR-D-06-CB1160, OR-D-06-CB1170, OR-D-06-CB1180, and OR-D-06-CB1190.

(o) One (1) Finish Product Handling and Loading process, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-D-08-CB1020, OR-D-08-CB1030, OR-D-08-CB2020, and OR-D-08-CB2030.
(2) One (1) Cokonyx belt conveyor, identified as OR-D-08-CD1035.

CASP Coal Receiving and Handling

(a) Phase 1 CASP C and CASP D coal handling, approved for construction in 2010, consisting of the following:

(1) One (1) feed hopper and conveyor No.1 (PHS1-HC1), with emissions uncontrolled.
(2) Two (2) CASP C coal conveyors, identified as PHS1C-C1 and PHS1C-C2, with emissions uncontrolled.
(3) One (1) CASP C coal feed hopper No.2, identified as CASPC-FH2, with hopper receiving emissions uncontrolled.
(4) Two (2) CASP D coal conveyors, identified as PHS1D-C1 and PHS1D-C2, with emissions uncontrolled.
(5) One (1) CASP D coal feed hopper No.2, identified as CASPD-FH2, with hopper receiving emissions uncontrolled.

(b) Phase 2 CASP coal handling, approved for construction in 2010, consisting of the following:

(1) Two (2) CASP coal conveyors, identified as CASP-C1 and CASP-C2, with emissions uncontrolled.
(2) One (1) CASP rotary stacker CASP-RS1, with emissions uncontrolled.
(3) Four (4) CASP coal conveyor feed hoppers, identified as CASPA-FH1, CASPB-FH1, CASPC-FH1, and CASPD-FH1, with emissions uncontrolled.
(4) Two (2) CASP A coal conveyors, identified as CASPA-C1 and CASPA-C2, with emissions uncontrolled.
(5) One (1) CASP A coal feed hopper No.2, identified as CASPA-FH2, with hopper receiving emissions uncontrolled.
(6) Two (2) CASP B coal conveyors, identified as CASPB-C1 and CASPB-C2, with emissions uncontrolled.
(7) One (1) CASP B coal feed hopper No.2, identified as CASPB-FH2, with hopper

receiving emissions uncontrolled.

(8) Two (2) CASP C coal conveyors, identified as CASPC-C1 and CASPC-C2, with emissions uncontrolled.

(9) Two (2) CASP D coal conveyors, identified as CASPD-C1 and CASPD-C2, with emissions uncontrolled.

(c) Storage Piles

(1) One (1) PHS1 intermediate coal storage pile No. 1.
(2) Four (4) PHS1 coal storage piles.
(3) One (1) PHS1 intermediate coal storage pile No. 2.
(4) Four (4) CASP coal storage piles.

CASP Cokonyx Loadout

(a) Two (2) single deck vibratory screener feeders for CASP A, identified as CASPA-VF1 and CASPA-VF2, with emissions uncontrolled.
(b) Two (2) single deck vibratory screener feeders for CASP B, identified as CASPB-VF1 and CASPB-VF2, with emissions uncontrolled.
(c) Two (2) single deck vibratory screener feeders for CASP C, identified as CASPC-VF1 and CASPC-VF2, with emissions uncontrolled.
(d) Two (2) single deck vibratory screener feeders for CASP D, identified as CASPD-VF1 and CASPD-VF2, with emissions uncontrolled.
(e) Two (2) emergency product by-pass bunkers for CASP A, identified as CASPA-EB1 and CASPA-EB2, with emissions uncontrolled.
(f) Two (2) emergency product by-pass bunkers for CASP B, identified as CASPB-EB1 and CASPB-EB2, with emissions uncontrolled.
(g) Two (2) emergency product by-pass bunkers for CASP C, identified as CASPC-EB1 and CASPC-EB2, with emissions uncontrolled.
(h) Two (2) emergency product by-pass bunkers for CASP D, identified as CASPD-EB1 and CASPD-EB2, with emissions uncontrolled.
(i) Two (2) Cokonyx loadout conveyors for CASP A, identified as CKNXC-A1 and CKNXC-A2, with emissions uncontrolled.
(j) Two (2) Cokonyx loadout conveyors for CASP B, identified as CKNXC-B1 and CKNXC-B2, with emissions uncontrolled.
(k) Two (2) Cokonyx loadout conveyors for CASP C, identified as CKNXC-C1 and CKNXC-C2, with emissions uncontrolled.
(l) Two (2) Cokonyx loadout conveyors for CASP D, identified as CKNXC-D1 and CKNXC-D2, with emissions uncontrolled.
(m) One (1) C/D Cokonyx conveyor, identified as CKNXC-C/D, with emissions uncontrolled.
(n) One (1) A/B Cokonyx conveyor, identified as CKNXC-A/B, with emissions uncontrolled.
(o) Two (2) C/D Cokonyx surge bins, collectively identified as CKNXBin-C/D1, with emissions uncontrolled.
(p) Two (2) A/B Cokonyx surge bins, collectively identified as CKNXBin-A/B1, with emissions uncontrolled.
(q) Storage Piles
(1) CASP A/B Cokonyx Emergency Storage Pile.
(2) CASP C/D Cokonyx Emergency Storage Pile.

Compliance Determination Requirements

The Compliance Determination Requirements applicable to the "Emission Units Associated with the Carbon Alloy Synthesis Plant (CASP) Project with Particulate Emissions Uncontrolled" are as follows:

(a) Paved Roads and Parking Lots
The average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass. The three (3) opacity readings for each vehicle pass shall be taken as follows:

(1) The first will be taken at the time of emission generation.
(2) The second will be taken five (5) seconds later.
(3) The third will be taken five (5) seconds later or ten (10) seconds after the first.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.

(b) Unpaved Roads and Parking Lots
The fugitive particulate emissions from unpaved roads shall be controlled by the implementation of a work program and work practice under the fugitive dust control plan.

(c) Batch Transfer
The average instantaneous opacity shall consist of the average of three (3) opacity readings taken five (5) seconds, ten (10) seconds, and fifteen (15) seconds after the end of one (1) batch loading or unloading operation. The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume.

(d) Continuous Transfer of Material Unto and Out of Storage Piles
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9. The opacity readings shall be taken at least four (4) feet from the point of origin.

(e) Wind Erosion from Storage Piles and Exposed Areas
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9, except that the opacity shall be observed at approximately four (4) feet from the surface at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. The limitations may not apply during periods when application of fugitive particulate control measures is either ineffective or unreasonable due to sustained very high wind speeds. During such periods, the company must continue to implement all reasonable fugitive particulate control measures and maintain records documenting the application of measures and the basis for a claim that meeting the opacity limitation was not reasonable given prevailing wind conditions.

(f) Material Transported by Truck or Rail
Compliance with this limitation shall be determined by 40 CFR 60, Appendix A, Method 22, except that the observation shall be taken at approximately right angles to the prevailing wind from the leeward side of the truck or railroad car. Material transported by truck or rail that is enclosed and covered shall be considered in compliance with the in plant transportation requirement.

(g) Material Transported by Front End Loader or Skip Hoist
Compliance with this limitation shall be determined by the average of three (3) opacity readings taken at five (5) second intervals. The three (3) opacity readings shall be taken as follows:

(1) The first will be taken at the time of emission generation.
(2) The second will be taken five (5) seconds later.

(3) The third will be taken five (5) seconds later or ten (10) seconds after the first.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand at least fifteen (15) feet from the plume approximately and at right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.

(h) Material Processing Limitations

(1) Compliance with stack opacity limitations from material processing facilities shall be determined using 40 CFR 60, Appendix A, Method 9.

(2) Compliance with the opacity limitations for fugitive particulate emissions from material processing equipment, except from a crusher at which a capture system is not used, shall be determined using 40 CFR 60, Appendix A, Method 9.

(3) Compliance with the opacity limitations for fugitive particulate emissions from a crusher at which a capture system is not used, shall be determined using 40 CFR 60, Appendix A, Method 9.

(4) Compliance with the opacity limitations for fugitive particulate emissions from a building enclosing all or part of the material processing equipment, except from a vent in the building shall be determined using 40 CFR 60, Appendix A, Method 22.

(5) Compliance with the opacity limitations for fugitive particulate emissions from building vents shall be determined using 40 CFR 60, Appendix A, Method 5 or 17 or 40 CFR 60, Appendix A, Method 9.

(i) Dust Handling Equipment
Compliance with this standard shall be determined by 40 CFR 60, Appendix A, Method 9.

These requirements are required to ensure compliance with 326 IAC 6.8-1-3 (Lake County Fugitive Particulate Matter Control Requirements) and to render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable to the Carbon Alloy Synthesis Plant (CASP) project.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T089-7663-00121. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

IDEM Change No. 1:

For clarity, IDEM has changed references to the general conditions: "in accordance with Section B", "in accordance with Section C", or other similar language, to "Section C ... contains the Permittee's obligations with regard to the records required by this condition." or other similar language.

The following Section D conditions have been revised due to this change:

- Condition D.1.10 - Preventive Maintenance Plan (previously Condition D.1.9)
- Condition D.1.11 -Testing Requirements (previously Condition D.1.10)
- Condition D.1.13 - Nos. 2 and 3 Precarbonization (previously Condition D.1.12)

- Condition D.1.14 - Record Keeping Requirements (previously Condition D.1.13)
- Condition D.1.15 - Reporting Requirements (previously Condition D.1.14)
- Condition D.2.10 - Preventive Maintenance Plan (previously Condition D.2.9)
- Condition D.2.17 -Testing Requirements (previously Condition D.2.16)
- Condition D.2.18 - Sulfur Fuel Sampling and Analysis (previously Condition D.2.17)
- Condition D.2.20 - Visible Emissions Notations (previously Condition D.2.19)
- Condition D.2.21 - Parametric Monitoring (previously Condition D.2.20)
- Condition D.2.23- Maintenance of Continuous Opacity Monitoring Equipment (previously Condition D.2.22)
- Condition D.2.24 - National Emission Standards for Hazardous Air Pollutants from Coke Oven Batteries - Record Keeping and Reporting Requirements (previously Condition D.2.23)
- Condition D.2.25 - Record Keeping Requirements (previously Condition D.2.24)
- Condition D.2.26 - Reporting Requirements (previously Condition D.2.25)
- Condition D.3.6 - Preventive Maintenance Plan
- Condition D.4.3 - Preventive Maintenance Plan
- Condition D.4.4 - Record Keeping Requirements
- Condition D.4.5 - Reporting Requirements
- Condition D.5.7 - Preventive Maintenance Plan
- Condition D.5.8 -Testing Requirements
- Condition D.5.9 - Sulfur Fuel Sampling and Analysis
- Condition D.5.12 - Record Keeping Requirements
- Condition D.5.13 - Reporting Requirements
- Condition D.5.14 - Natural Gas Fired Boiler Certification
- Condition D.6.6 - Preventive Maintenance Plan
- Condition D.6.7 -Testing Requirements
- Condition D.6.9 - Visible Emissions Notations
- Condition D.6.10 - Parametric Monitoring
- Condition D.6.14 - General Record Keeping Requirements
- Condition D.6.15 - General Reporting Requirements
- Condition D.7.10 - Preventive Maintenance Plan
- Condition D.7.11 -Testing Requirements
- Condition D.7.12 - Sulfur Fuel Sampling and Analysis
- Condition D.7.15 - Visible Emissions Notations
- Condition D.7.16 - Parametric Monitoring
- Condition D.7.17 - General Record Keeping Requirements
- Condition D.7.18 - General Reporting Requirements
- Condition D.8.7 - Preventive Maintenance Plan
- Condition D.8.8 -Particulate Matter Testing Requirements
- Condition D.8.9 - Sulfur Dioxide Testing Requirements
- Condition D.8.11 - Visible Emissions Notations
- Condition D.8.12 - Parametric Monitoring
- Condition D.8.14 - General Record Keeping Requirements
- Condition D.9.8 - Preventive Maintenance Plan
- Condition D.9.9 -Particulate Testing Requirements
- Condition D.9.10 - Sulfur Dioxide Testing Requirements
- Condition D.9.13 - Visible Emissions Notations
- Condition D.9.14 - Parametric Monitoring
- Condition D.9.16 - General Record Keeping Requirements
- Condition D.10.3 - Preventive Maintenance Plan
- Condition D.10.4 - Testing Requirements
- Condition D.10.5 - Sulfur Fuel Sampling and Analysis
- Condition D.10.6 - Record Keeping Requirements
- Condition D.10.7 - Reporting Requirements
- Condition D.11.9 - Record Keeping Requirements
- Condition D.11.10 - Reporting Requirements

- Condition D.12.6 - Preventive Maintenance Plan
- Condition D.12.7 - Record Keeping Requirements
- Condition D.12.8 - Reporting Requirements
- Condition D.13.3 - Record Keeping Requirements
- Condition D.14.3 - Preventive Maintenance Plan
- Condition D.14.4 - Sulfur Fuel Sampling and Analysis
- Condition D.14.5 - Visible Emissions Notations
- Condition D.14.6 - Record Keeping Requirements
- Condition D.14.7 - Reporting Requirements
- Condition D.14.8 - Natural Gas Fired Boiler Certification
- Condition D.15.7 - Preventive Maintenance Plan
- Condition D.15.8 - Testing Requirements
- Condition D.15.9 - Sulfur Fuel Sampling and Analysis
- Condition D.15.11 - Visible Emissions Notations
- Condition D.15.12 - Record Keeping Requirements
- Condition D.15.13 - Reporting Requirements
- Condition D.15.14 - Natural Gas Fired Boiler Certification
- Condition D.16.3 - Record Keeping Requirements
- Condition D.16.4 - Reporting Requirements
- Condition E.1.6 - Preventive Maintenance Plan
- Condition E.1.7 - Testing Requirements
- Condition E.1.11 - Visible Emissions Notations
- Condition E.1.12 - Parametric Monitoring
- Condition E.1.13 - Record Keeping Requirements
- Condition E.1.14 - Reporting Requirements
- Condition E.2.5 - Preventive Maintenance Plan
- Condition E.2.7 - Testing Requirements
- Condition E.2.9 - Record Keeping Requirements
- Condition E.3.3 - Preventive Maintenance Plan
- Condition E.3.4 - Record Keeping Requirements
- Condition E.3.5 - Reporting Requirements
- Condition E.4.5 - Preventive Maintenance Plan
- Condition E.4.7 - Testing Requirements
- Condition E.4.10 - Visible Emissions Notations

IDEM Change No. 2:

IDEM has decided that the phrases "no later than" and "not later than" are clearer than "within" in relation to the end of a timeline. Therefore all timeline have been switched to "no later than" or "not later than" except when the underlying rules states "within."

The exceptions to this revision are as follows:

1. Wherever the timeframe states "within a reasonable" time. This is not considered a specifically stated timeframe.

2. Pursuant to 326 IAC 2-7-16(b)(4), for an emergency lasting one (1) hour or more, the Permittee notified the commissioner within four (4) business days. Pursuant to 326 IAC 2-7-16(b)(5), the Permittee submitted the notice either in writing or by facsimile of the emergency to the commissioner within two (2) working days. Therefore, this change has not been made in Section B - Emergency Provisions paragraphs (b)(4) and (b)(5).

3. Pursuant to 326 IAC 2-7-19(b), a source shall pay the annual fee within thirty (30) calendar days of receipt of a billing by the department. Therefore, this change has not been made in Section B - Annual Fee Payment.

4. 326 IAC 2-2-8 (b)(4) and (b)(5) require the submittal of a report "within sixty (60) days". 326 IAC 2-3-2 (a)(m)(4) and (a)(m)(5) require the submittal of a report "within sixty (60) days". Therefore, this change has not been made in Section C - General Reporting Requirements paragraph (g).

The following conditions have been revised due to this change:

- Condition B.10 - Preventive Maintenance Plan (previously Condition D.1.9)
- Condition C.19 - Actions Related to Noncompliance Demonstrated by a Stack Test
- Condition C.21 - General Record Keeping Requirements
- Condition C.23 - General Record Keeping Requirements (previously Condition D.1.13)
- Condition D.2.17 -Testing Requirements (previously Condition D.2.16)
- Condition D.2.26 - Reporting Requirements (previously Condition D.2.25)
- Condition D.4.5 - Reporting Requirements
- Condition D.5.8 -Testing Requirements
- Condition D.5.13 - Reporting Requirements
- Condition D.6.7 -Testing Requirements
- Condition D.6.15 - General Reporting Requirements
- Condition D.7.11 -Testing Requirements
- Condition D.7.18 - General Reporting Requirements
- Condition D.8.8 -Particulate Matter Testing Requirements
- Condition D.9.9 -Particulate Testing Requirements
- Condition D.10.4 - Testing Requirements
- Condition D.10.7 - Reporting Requirements
- Condition D.12.8 - Reporting Requirements
- Condition D.13.3 - Record Keeping Requirements
- Condition D.14.7 - Reporting Requirements
- Condition D.15.8 - Testing Requirements
- Condition D.15.13 - Reporting Requirements
- Condition D.16.4 - Reporting Requirements
- Condition E.1.6 - Preventive Maintenance Plan
- Condition E.1.7 - Testing Requirements
- Condition E.1.14 - Reporting Requirements
- Condition E.2.7 - Testing Requirements
- Condition E.3.5 - Reporting Requirements

IDEM Change No. 3:

326 IAC 2-7 requires that "a responsible official" perform certain actions. 326 IAC 2-7-1(34) allows for multiply people to meet the definition of "responsible official". Therefore, IDEM is revising all instances of "the responsible official" to read "a responsible official".

IDEM Change No. 4:

IDEM, OAQ has decided to clarify what rule requirements a certification need to meet. IDEM has decided to remove the last sentence dealing with the need for certification from the forms because the Condition requiring the form already addresses this issue.

The exceptions to this revision are as follows:

1. Section B - Annual Compliance Certification: With the exception of the final statement the word "certification" references the annual compliance certification report, not a certification in accordance with the requirements of 326 IAC 2-7-6(1).

Therefore, the above revision is made only in the final statement.

2. Section B - Credible Evidence: The reference is to "compliance certifications" not a certification in accordance with 326 IAC 2-7-6(1).

Since the requirement to attach a certification, or not to attach a certification, that meets the requirements of 326 IAC 2-7-6(1) is specified in the applicable Section B, Section C, and D Sections requirements, IDEM has determined that it is not necessary to reference the requirement on the reporting forms. Changes to the reporting forms are not shown in this Technical Support Document (TSD).

IDEM Change No. 5:

Section B - Duty to Perform has been revised.

IDEM Change No. 6:

To clarify that Section B - Certification only states what a certification must be, IDEM has revised the condition.

IDEM Change No. 7:

IDEM has decided to clarify Section B - Preventive Maintenance Plan.

IDEM Change No. 8:

IDEM, OAQ is revising Section B - Emergency Provisions to delete paragraph (h). 326 IAC 2-7-5(3)(C)(ii) allows that deviations reported under an independent requirement do not have to be included in the Quarterly Deviation and Compliance Monitoring Report.

IDEM Change No. 9:

IDEM, OAQ has decided that having a separate condition for the reporting of deviations is unnecessary. Therefore, IDEM has removed Section B - Deviation from Permit Requirements and Conditions and added the requirements of that condition to Section C - General Reporting Requirements.

IDEM Change No. 10:

IDEM has decided to state which rule establishes the authority to set a deadline for the Permittee to submit additional information. Therefore, Section B - Permit Renewal has been revised.

IDEM Change No. 11:

IDEM has decided to state that no notice is required for approved changes in Section B - Permit Revision Under Economic Incentives and Other Programs.

IDEM Change No. 12:

IDEM has added 326 IAC 5-1-1 to the exception clause of Section C - Opacity, since 326 IAC 5-1-1 does list exceptions.

IDEM Change No. 13:

IDEM has revised Section C - Incineration to more closely reflect the two underlying rules.

IDEM Change No. 14:

IDEM has changed the title, order, and wording of the condition formerly entitled Section C - Fugitive Dust Emissions to match 326 IAC 6.8-10-3.

IDEM Change No. 15:

IDEM has removed the first paragraph of Section C - Performance Testing due to the fact that specific testing conditions elsewhere in the permit will specify the timeline and procedures.

IDEM Change No. 16:

IDEM has revised Section C - Compliance Monitoring. The reference to recordkeeping has been removed due to the fact that other conditions alreading address recordkeeping. The voice of the condition has been change to clearly indicate that it is the Permittee that must follow the requirements of the condition.

IDEM Change No. 17:

IDEM has revised Section C - Response to Excursions or Exceedances. The introduction sentence has been added to clarify that it is only when an excursion or exceedance is detected that the requirements of this condition need to be followed. The word "excess" was added to the last sentence of paragraph (a) because the Permittee only has to minimize excess emissions. The middle of paragraph (b) has been deleted as it was duplicative of paragraph (a). The phrase "or are returning" was added to subparagraph (b)(2) as this is an acceptable response assuming the operation or emission unit does return to normal or its usual manner of operation. The phrase "within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable" was replaced with "normal or usual manner of operation" because the first phrase is just a limited list of the second phrase. The recordkeeping required by paragraph (e) was changed to require only records of the response because the previously listed items are required to be recorded elsewhere in the permit.

IDEM Change No. 18:

IDEM has revised Section C - Actions Related to Noncompliance Demonstrated by a Stack Test. The requirements to take response steps and minimize excess emissions have been removed because Section C - Response to Excursions or Exceedances already requires response steps related to exceedances and excess emissions minimization. The start of the timelines was switched from "the receipt of the test results" to "the date of the test." There was confusion if the "receipt" was by IDEM, the Permittee, or someone else. Since the start of the timelines has been moved up, the length of the timelines was increased. The new timelines require action within a comparable timeline; and the new timelines still ensure that the Permittee will return to compliance within a reasonable timeframe.

IDEM Change No. 19:

Paragraph (b) of Section C - Emission Statement has been removed. It was duplicative of the requirement in Section C - General Reporting Requirements.

IDEM Change No. 20:

The voice of paragraph (b) of Section C - General Record Keeping Requirements has been change to clearly indicate that it is the Permittee that must follow the requirements of the paragraph.

IDEM Change No. 21:

IDEM has decided to simplify the referencing in Section C - Compliance with 40 CFR 82 and 326 IAC 22-1.

IDEM Change No. 22:

IDEM has decided to clarify Section D - Testing Requirements.

IDEM Change No. 23:

IDEM has decided to allow the Permittee the option of using manufacturer's recommendations for the calibration frequency. Section D - Parametric Monitoring conditions have been revised.

IDEM Change No. 24:

The phrase "of this permit" has been added to the paragraph of the Quarterly Deviation and Compliance Monitoring Report to match the underlying rule.

IDEM Change No. 25:

The word "status" has been added to Section D - Recordkeeping Requirements. The Permittee has the obligation to document the compliance status. The wording has been revised to properly reflect this.

IDEM Change No. 26:

The word "status" has been added to Section D - Reporting Requirements. The Permittee has the obligation to document the compliance status. The wording has been revised to properly reflect this.

As a result of the above changes, Section B, Section C, Sections D.1 through D.16, and Sections E.1 through E.4 have been modified as follows:

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. ~~The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~ Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

* * *

B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(a) ~~Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by the "responsible official" of truth, accuracy, and completeness. This certification shall state that~~, **A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:**

(i) it contains a certification by a "responsible official", as defined by 326 IAC 2-7-1 (34), and

(ii) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) ~~One (1) certification shall be included, using~~ **The Permittee may use** the attached Certification Form, **or its equivalent,** with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) A "responsible official" is defined at 326 IAC 2-7-1(34).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)][326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) ~~within~~ **no later than** ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(34).

The Permittee shall implement the PMPs.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance

causes or is the primary contributor to an exceedance of any limitation on emissions ~~or potential to emit~~. The PMPs **and their submittal** do not require ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(34).

(c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Emergency Provisions [326 IAC 2-7-16]

* * *

(b) (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

* * *

~~(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report. Any emergencies that have been previously reported pursuant to paragraph (b)(5) of this condition and certified by an "authorized individual" need only referenced by the date of the original report.~~

~~B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]~~

~~(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:~~

~~Indiana Department of Environmental Management~~
~~Compliance and Enforcement Branch, Office of Air Quality~~
~~100 North Senate Avenue~~
~~MC 61-53 IGCN 1003~~
~~Indianapolis, Indiana 46204-2251~~

~~using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.~~

~~The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

~~(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.~~

~~B.16~~**B.15** Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(34).

* * *

~~B.17~~**B.16** Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(34).

* * *

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified**, pursuant to 326 IAC 2-7-4(a)(2)(D),** in writing by IDEM, OAQ any additional information identified as being needed to process the application.

~~B.18~~**B.17** Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12] [40 CFR 72]

* * *

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application ~~shall be certified~~ **does require a certification that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(34).

* * *

~~B.19~~**B.18** Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

(a) No Part 70 permit revision **or notice** shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

* * *

~~B.20~~**B.19** Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

* * *

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(34).

* * *

~~B.21~~**B.20** Source Modification Requirement [326 IAC 2-7-10.5]

No changes made to this Condition.

~~B.22~~**B.21** Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

No changes made to this Condition.

~~B.23~~**B.22** Transfer of Ownership or Operational Control [326 IAC 2-7-11]

* * *

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit

responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(34).

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

* * *

~~B.24~~**B.23** Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

No changes made to this Condition.

B.24 Advanced Source Modification Approval [326 IAC 2-7-5(16)] [326 IAC 2-7-10.5]

(a) The requirements to obtain a source modification approval under 326 IAC 2-7-10.5 or a permit modification under 326 IAC 2-7-12 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3.

(b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction, work is suspended for a continuous period of one (1) year or more.

~~B.25~~**B.25** Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

No changes made to this Condition.

C.1 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in **326 IAC 5-1-1 (Applicability) and** 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

C.2 Open Burning [326 IAC 4-1] [IC 13-17-9]

No changes made to this Condition.

C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator ~~or incinerate any waste or refuse~~ except as provided in 326 IAC 4-2 ~~and 326 IAC 9-1-2~~ **or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.**

C.5 Fugitive Dust Emissions [326 IAC 6.8-10-3 ~~and 326 IAC 6.8-11~~]

* * *

(c) ~~The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%). Where adequate wetting of the material for fugitive~~

~~particulate emissions control is prohibitive to further processing or reuse of the material, the opacity shall not exceed ten percent (10%) three (3) minute average. This includes material transfer to initial hopper of material processing facility as defined in 326 IAC 6.8-10-2 or material transfer for transportation within or outside the source property including but not limited to the following:~~

~~(1) Transfer of slag product for use in asphalt plant~~
~~(A) From a storage pile to a front end loader; and~~
~~(B) From a front end loader to a truck.~~
~~(2) Transfer of sinter blend for use at the sinter plant:~~
~~(A) From a storage pile to a front end loader; and~~
~~(B) From a front end loader to a truck; and~~
~~(C) From a truck to the initial processing point~~
~~(3) Transfer of coal for use at a coal processing line:~~
~~(A) From a storage pile to a front end loader, and~~
~~(B) From a front end loader to the initial hopper of a coal processing line.~~

~~Compliance with any operation lasting less than three (3) minutes shall be determined as an average of consecutive operations recorded at fifteen (15) second intervals for the duration of the operation.~~

~~(d) Slag and kish handling activities at integrated iron and steel plants shall comply with the following particulate emissions limits:~~

~~(1) The opacity of fugitive particulate emissions from transfer from pots and trucks into pits shall not exceed twenty percent (20%) on a six (6) minute average.~~

~~(2) The opacity of fugitive particulate emissions from transfer from pits into front end loaders and from transfer from front end loaders into trucks shall comply with the fugitive particulate emission limits in 326 IAC 6.8-10-3(9).~~

~~(e)~~**(c)** The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.

~~(f)~~**(d)** The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average. ~~These limitations may not apply during periods when application of fugitive particulate control measures is either ineffective or unreasonable due to sustained very high wind speeds. During such periods the company must continue to implement all reasonable fugitive particulate control measures and maintain records documenting the application of measures and the basis for a claim that meeting opacity limitation was not reasonable given prevailing wind conditions.~~

~~(g)~~**(e)** There shall be a zero (0) percent frequency of visible emission observations of a material during the in plant transportation of material by truck or rail at any time. ~~Material transported by truck or rail that is enclosed and covered shall be considered in compliance with in-plant transportation requirement.~~

~~(h)~~**(f)** The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).

~~(i)~~**(g) Material processing facilities shall include the following:**

(1) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.

~~(j)~~**(2)** The PM_{10} emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(3) The PM_{10} stack emissions from a material processing facility shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(4) The opacity of fugitive particulate emissions from the material processing facilities, except crusher at which a capture system is not used, shall not exceed ten percent (10%) opacity.

(5) The opacity of fugitive particulate emission from a crusher at which a capture system is not used shall not exceed fifteen percent (15%).

~~(k)~~**(h)** The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

(i) Material transfer limits shall be as follows:

(1) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

(2) Where adequate wetting of the material for fugitive particulate emissions control is prohibitive to further processing or reuse of the material, the opacity shall not exceed ten percent (10%), three (3) minute average.

(3) Slag and kish handling activities at integrated iron and steel plants shall comply with the following particulate emissions limits:

(A) The opacity of fugitive particulate emissions from transfer from pots and trucks into pits shall not exceed twenty percent (20%) on a six (6) minute average.

(B) The opacity of fugitive particulate emissions from transfer from pits into front end loaders and from transfer from front end loaders into trucks shall comply with the fugitive particulate emission limits in 326 IAC 6.8-10-3(9).

~~(l)~~**(j)** Any facility or operation not specified in 326 IAC 6.8-10-3 shall meet a twenty percent (20%), three (3) minute average opacity standard.

~~(m) The PM_{10} emissions from each material processing stack shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.~~

~~(n) Fugitive particulate matter from the material processing facilities except at a crusher in which a capture system is not used shall not exceed ten percent (10%) opacity.~~

~~(o) Fugitive particulate matter from a crusher in which a capture system is not used shall not exceed fifteen percent (15%) opacity.~~

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the attached Fugitive Dust Control Plan submitted on March 1, 2003.

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

* * *

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(34).

* * *

C.8 Performance Testing [326 IAC 3-6]

(a) ~~All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.~~

~~A~~ **For performance testing required by this permit, a** test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(34).

C.11 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, **for** all monitoring ~~and record keeping~~ requirements not already legally required**, the Permittee shall be allowed up to** ~~shall be implemented within~~ ninety (90) days ~~of~~ **from the date of** permit issuance or ~~ninety (90) days~~ of initial start-up, whichever is later**, to begin such monitoring**. ~~If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.~~ If due to circumstances beyond ~~its~~ **the Permittee's** control, ~~that~~ **any monitoring** equipment **required by this permit** cannot be installed and operated ~~within~~ **no later than** ninety (90) days **after permit issuance or the date of initial startup, whichever is later**, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require ~~the~~ **a** certification **that meet the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(34).

* * *

C.18 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) ~~Upon detecting an excursion or exceedance,~~ the Permittee shall **take reasonable response steps to** restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing **excess** emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction ~~and taking any **reasonable response steps** to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions)~~. ~~Corrective actions~~ **The response** may include, but ~~are~~ **is** not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned **or are returning** to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to ~~within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable~~ **normal or usual manner of operation**.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall **record** ~~maintain the following records~~ ~~**of**~~ **the reasonable responses steps taken.** ~~:~~

~~(1) monitoring data;~~

~~(2) monitor performance data, if applicable; and~~

~~(3) corrective actions taken.~~

C.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the ~~Permittee shall take appropriate response actions. The~~ Permittee shall submit a description of **its** ~~these~~ response actions to IDEM, OAQ, ~~within~~ **no later than** ~~thirty (30) days of receipt of the test results~~ **seventy-five (75) days after the date of the test**. ~~The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.~~

(b) A retest to demonstrate compliance shall be performed ~~within~~ **no later than** one hundred **eighty (180)** ~~twenty (120)~~ ~~of receipt of the original test results~~ **days after the date of the test**. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred **eighty (180)** ~~twenty (120)~~ days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require ~~the~~ **a** certification **that meets the requirements of 326 IAC 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(34).

C.20 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(34).

~~(b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.~~

C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3]

* * *

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required**, the Permittee** shall be **allowed** ~~implemented within~~ **up to** ninety (90) days **from the date** of permit issuance or ~~ninety (90) days~~ **the date** of initial start-up, whichever is later**, to begin such record keeping**.

C.23 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2][326 IAC 2-3]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported **except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.** This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by a "responsible official" as defined by 326 IAC 2-7-1(34). **A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.**

(b) The ~~report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to~~ **address for report submittal is**:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(c) * * *

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted ~~within~~ **no later than** thirty (30) days of the end of the reporting period. All reports do require ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(34).

* * *

(g) The report for project at an existing emissions unit shall be submitted ~~within~~ **no later than** sixty (60) days after the end of the year and contain the following:

(1) The name, address, and telephone number of the major stationary source.

(2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.

(3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).

(4) Any other information that the Permittee ~~deems fit~~ **wishes** to include in this report **such as an explanation as to why the emissions differ from the preconstruction projection**.

* * *

C.25 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with ~~the~~ **applicable** standards for recycling and emissions reduction~~:~~**.**

~~(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.~~

~~(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.~~

~~(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.~~

~~D.1.9~~**D.1.10** Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, ~~in accordance with Section B - Preventive Maintenance Plan, of this permit~~, is required for these facilities and any associated control devices. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

~~D.1.10~~**D.1.11** Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

* * *

(d) Pursuant to the COMS Waiver, dated May 16, 1997, the Permittee shall conduct performance tests on the Nos. 2 and 3 Precarbonization Lines for Coke Batteries No. 2 and 3, in accordance with (b) and (c) above for PM_{10} emissions using the schedule and testing frequency established in the COMS Waiver. ~~All tests shall be performed in accordance with Section C – Performance Testing.~~

(e) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

~~D.1.11~~**D.1.12** Particulate Matter Control

No changes made to this Condition.

~~D.1.12~~**D.1.13** Nos. 2 and 3 Precarbonization [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

* * *

(c) **The Permittee shall take corrective actions in accordance with the COMS Waiver Compliance Monitoring Plan or reasonable response steps whenever the parameters fall outside the normal operating range as set forth in the Compliance Monitoring Plan. Section C - Response to Excursions or Exceedances contains the**

Permittee's obligation with regards to the reasonable response steps required by this condition. ~~Reasonable response steps shall be taken in accordance with Section C - Response to Excursions or Exceedances or corrective actions shall be taken in accordance with the COMS Waiver Compliance Monitoring Plan whenever the parameters fall outside the normal operating range as set forth in the Compliance Monitoring Plan.~~ An out of range parameter is not a deviation from this permit. Failure to take **corrective action or** response steps ~~in accordance with Section C - Response to an Excursions or Exceedances or the COMS Waiver Compliance Monitoring Plan~~ shall be considered a deviation of this permit.

~~D.1.13~~**D.1.14** Record Keeping Requirements

(a) To document **the** compliance **status** with Condition ~~D.1.10~~**D.1.11**, the Permittee shall maintain records of the stack tests conducted in accordance with COMS Waiver for Nos. 2 and 3 Precarbonization Lines for Coke Batteries No. 2 and 3.

(b) To document **the** compliance **status** with the Condition ~~D.1.12~~**D.1.13**, the Permittee shall maintain records of the parametric monitoring required under the COMS Waiver Compliance Monitoring Plan for the Nos. 2 and 3 Precarbons.

(c) ~~All records shall be maintained in accordance with~~ Section C - General Record Keeping Requirements ~~of this permit~~ **contains the Permittee's obligations with regards to the records required by this condition**.

~~D.1.14~~**D.1.15** Reporting Requirements

Pursuant to the COMS Waiver issued by IDEM May 16, 1997, the Permittee shall submit quarterly reports on relative parameters which are indicative of process and control device operation for the life of the Nos. 2 and 3 Coke Battery Precarbonization facilities . **Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.** The report submitted by the Permittee does require **a** ~~the~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by **a** ~~the~~ "responsible official" as defined by 326 IAC 2-7-1(34).

~~D.2.9~~**D.2.10** Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, ~~in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for these facilities and any associated control devices. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

~~D.2.10~~**D.2.11** National Emission Standards for Hazardous Air Pollutants from Coke Oven Batteries - Visible Emissions Inspection Requirements [40 CFR 63.309][326 IAC 20]

No changes made to this Condition.

~~D.2.11~~**D.2.12** Visible Emission Inspections for Charging [326 IAC 11-3-4(a)]

No changes made to this Condition.

~~D.2.12~~**D.2.13** Charge Port Lids and Off take Piping - Emissions Testing [326 IAC 11-3-4(b)]

No changes made to this Condition.

~~D.2.13~~**D.2.14** Visible Emissions for Oven Doors [326 IAC 11-3-4(c)]

No changes made to this Condition.

~~D.2.14~~**D.2.15** Visible Emissions Inspections for Gas Collector Main [326 IAC 11-3-4(e)]

No changes made to this Condition.

~~D.2.15~~**D.2.16** Visible Emissions Inspections Pushing [326 IAC 6.8-9-3(a)(3)]

No changes made to this Condition.

~~D.2.16~~**D.2.17** Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) ~~Within~~ **Not later than** thirty (30) months after issuance of this permit **(Permit No. T089-7663-00121)** or two and one half (2 ½) years from the date of the **most recent** ~~latest~~ valid compliance demonstration, which ever is earlier, in order to demonstrate compliance with Condition D.2.3, the Permittee shall perform PM_{10} testing on the No. 5 and 7 Coke Batteries Pushing Baghouse Stack CP6050, using the appropriate methods to measure PM_{10} as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every two and one half (2 ½) years from the date of the ~~last~~ **most recent** valid compliance demonstration. ~~All tests shall be performed in accordance with Section C - Performance Testing.~~

(b) ~~Within~~ **Not later than** thirty (30) months after issuance of this permit **(Permit No. T089-7663-00121)** or five (5) years from the date of the **most recent** ~~latest~~ valid compliance demonstration, which ever is earlier, in order to demonstrate compliance with Condition D.2.3, the Permittee shall perform PM_{10} testing on the No. 2, No. 3, No. 5 and No. 7 coke batteries underfire Stacks CP6040, CP6045, CP6049 and CP6053, using the appropriate methods to measure PM_{10} as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of ~~this~~ **the most recent** valid compliance demonstration. ~~All tests shall be performed in accordance with Section C - Performance Testing.~~

(c) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation wtih regard to the performance testing required by this condition.

~~D.2.17~~**D.2.18** Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2)]

To demonstrate compliance with condition D.2.7, the Permittee shall perform ~~the~~ Sulfur Fuel Sampling and Analysis**.** ~~in accordance with~~ Section C - Sulfur Fuel Sampling and Analysis **contains the Permittee's obligation with regard to the sampling and analysis required by this condition** ~~of this permit~~.

~~D.2.18~~**D.2.19** Particulate Matter Control [326 IAC 2-7-6(6)]

No changes made to this Condition.

~~D.2.19~~**D.2.20** Visible Emissions Notations

* * *

(e) If abnormal emissions are observed, the Permittee shall take reasonable response ~~steps in accordance with~~**.** Section C - Response to Excursions or Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~ shall be considered a deviation of this permit.

(f) The Permittee shall comply with the most current Continuous Compliance Plan visible emission evaluation program~~, in accordance with~~**.** Section C - Continuous Compliance Plan **contains the Permittee's obligation with regards to the visible emission evaluation program required by this condition.**

~~D.2.20~~**D.2.21** Parametric Monitoring

(a) The Permittee shall record the pressure drop across the baghouse CP3041 used in conjunction with No. 5 and No. 7 coke oven batteries pushing operations at least once per day when pushing is occurring. When for any one reading, the pressure drop across each baghouse is outside the normal range of 3 to 15 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response ~~steps in accordance with~~**.** Section C - Response to Excursions or Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~, shall be considered a deviation of this permit.

(b) The Permittee shall comply with the most current Continuous Compliance Plan for the baghouse operation, recording and maintenance~~, in accordance with~~. Section C - Continuous Compliance Plan **contains the Permittee's obligation with regards to the baghouse operation, recording and maintenance required by this condition.**

(c) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months **or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.**

~~D.2.21~~**D.2.22** Continuous Opacity Monitoring (COM) [326 IAC 3-5]

No changes made to this Condition.

~~D.2.22~~**D.2.23** Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

* * *

(d) Whenever a COMS is malfunctioning or is down for maintenance, or repairs for a period of twenty four (24) hours or more, and a backup COMS is not on line within twenty-four (24) hours of shutdown or malfunction of the primary COMS, the Permittee shall provide a certified opacity reader, who may be an employee of the Permittee or an independent contractor, to self-monitor the emissions from the emission unit stack.

(1) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.

(2) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least twice per day during daylight operations, with at least four (4) hours between each set of readings until a COMS is on line.

(3) Method 9 readings may be discontinued once a COM is online.

(4) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.

(5) If abnormal emissions are observed, the Permittee shall take reasonable response ~~steps in accordance with~~**.** Section C - Response to Excursions and Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition** . Observation of abnormal emissions that do not violate an applicable opacity limit is not a deviation from this permit. Failure to take response steps ~~in accordance with~~

~~Section C - Response to Excursions and Exceedances~~, shall be considered a deviation from this permit.

* * *

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

~~D.2.23~~**D.2.24** National Emission Standards for Hazardous Air Pollutants from Coke Oven Batteries - Record Keeping and Reporting Requirements [40 CFR 63.311][326 IAC 20]

* * *

(b) The Permittee shall include the following information in the semi-annual compliance certification:

(1) Certification**, that meets the requirements of 326 IAC 2-7-6(1)**, signed by **a** ~~the~~ responsible official, that no coke oven gas was vented, except through the bypass/bleeder stack flare system of a by-product coke oven battery during the reporting period or that venting report has been submitted in accordance with 40 CFR 63.311(e).

(2) Certification**, that meets the requirements of 326 IAC 2-7-6(1)**, signed by **a** ~~the~~ responsible official, that a startup, shutdown, or malfunction event did not occur for a coke oven battery during the reporting period or that a startup, shutdown, or malfunction event did occur and a report was submitted in accordance with 40 CFR 63.310(e).

(3) Certification**, that meets the requirements of 326 IAC 2-7-6(1)**, signed by **a** ~~the~~ responsible official, that work practices were implemented if applicable under 40 CFR 63.306.

~~D.2.24~~**D.2.25** Record Keeping Requirements

(a) To document **the** compliance **status** with Condition ~~D.2.21~~**D.2.22**, the Permittee shall maintain records of the continuous opacity monitoring (COM) data in accordance with 326 IAC 3-5. Records shall be complete and sufficient to establish compliance with the limits established in this section. When the COM system is not functioning, the Permittee shall maintain records sufficient to demonstrate compliance ~~D.2.22~~**D.2.23**.

(b) To document **the** compliance **status** with Condition D.2.7, the Permittee shall maintain records in accordance with Section C - Sulfur Dioxide (SO_2) Record Keeping Requirements (Entire Source).

(c) To document **the** compliance **status** with Condition D.2.8, the Permittee shall maintain records of the natural gas usage for 12 month consecutive periods, with compliance demonstrated at the end of each month.

(d) To document the compliance status with Condition D.2.9(b) and D.2.9(c), the Permittee shall maintain a record of the dates the No. 5 Coke Oven Battery, the No. 7 Coke Oven Battery, and the Nos. 5 and 6 Quench Towers are each permanently shutdown.

~~(d)~~**(e)** To document **the** compliance **status** with Condition ~~D.2.19~~**D.2.20**, the Permittee shall maintain records of the once per day visible emissions notations of the stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

~~(e)~~**(f)** To document **the** compliance **status** with Condition ~~D.2.20~~**D.2.21**, the Permittee shall maintain records of the once per day pressure drop during normal operation. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g. the process did not operate that day).

~~(f)~~**(g)** ~~All records shall be maintained in accordance with~~ Section C - General Record Keeping Requirements ~~of this permit~~ **contains the Permittee's obligations with regards to the records required by this condition**.

~~D.2.25~~**D.2.26** Reporting Requirements

(a) A quarterly report of opacity exceedances shall be submitted ~~to the address listed in Section C -General Reporting Requirements, of this permit,~~ ~~within~~ **not later than** thirty (30) days after the end of the quarter being reported. **Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.**

(b) A quarterly summary report to document **the** compliance **status** with condition D.2.7 shall be submitted ~~to IDEM accordance with~~ **not later than thirty (30) days after the end of the quarter being reported**. Section C – Sulfur Dioxide SO_2 Reporting Requirements (Entire Source) **contains the Permittee's obligations with regards to the records required by this condition**..

(c) A quarterly summary of the natural gas usage to document **the** compliance **status** with Condition D.2.8, shall be submitted ~~in accordance with Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, within~~ **not later than** thirty (30) days after the end of the quarter being reported. **Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.**

National Emission Standards for Hazardous Air Pollutants (NESHAP) for Coke Ovens: Pushing, Quenching and Battery Stacks 40 CFR 63, Subpart CCCCC]

~~D.2.26~~**D.2.27** National Emission Standards for Hazardous Air Pollutants (NESHAP) for Coke Ovens: Pushing, Quenching and Battery Stacks [40 CFR 63, Subpart CCCCC]

No changes made to this Condition.

D.3.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, ~~in accordance with Section B - Preventative Maintenance Plan of this permit~~ is required for these facilities and any associated control devices. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, ~~in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for these facilities and associated control devices. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

D.4.4 Record Keeping Requirements

(a) To document **the** compliance **status** with Condition D.4.2, the Permittee shall maintain records of the downtime hours of the Coke Oven Gas Desulfurization Plant.

(b) ~~All records shall be maintained in accordance with~~ Section C - General Record Keeping Requirements, ~~of this permit~~ **contains the Permittee's obligations with regard to the records required by this condition**.

D.4.5 Reporting Requirements

A quarterly summery report to document compliance with Condition D.4.2 shall be submitted ~~to IDEM~~ **not later than thirty (30) days after the end of the quarter being reported.** ~~accordance with~~**. Section** C - Sulfur Dioxide SO_2 Reporting Requirements (Entire Source) **contains the Permittee's obligation with regard to the reporting required by this condition**. The report submitted by the Permittee does require **a** ~~the~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by **a** ~~the~~ "responsible official" as defined by 326 IAC 2-7-1(34).

D.5.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, ~~in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for the boilers and any associated control devices. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

Compliance Determination Requirements

D.5.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [326 IAC 2-1.1-5] [40 CFR 60, Subpart Db]

Pursuant to Significant Source Modification 089-19678-0012, issued October 29, 2004 and in order to demonstrate compliance with Conditions D.5.3 and D.5.86, the Permittee shall perform NO_X testing for boilers No. 9, No. 10, and the temporary rental boiler ~~within~~ **not later than** 60 days after achieving the maximum production, but not later than 180 days after initial startup, utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with **the provisions of 326 IAC 3-6 (Source Sampling Procedures).** Section C - Performance Testing **contains the Permittee's obligation with regard to the performance testing required by this condition**. Pursuant to 40 CFR 60.46b(e), the performance test requirements may be satisfied by using 30 day average emission rate data from NO_X CEMs.

D.5.9 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2]

To demonstrate compliance with condition D.5.4, the Permittee shall perform ~~the~~ Sulfur Fuel Sampling and Analysis**.** ~~in accordance with~~**.** Section C - Sulfur Fuel Sampling and Analysis **contains the Permittee's obligation with regard to the sampling and analysis required by this condition** ~~of this permit~~.

D.5.12 Record Keeping Requirements

(a) To document **the** compliance **status** with Condition D.5.3(b), D.5.3(c) and D.5.6, the Permittee shall maintain records of the NO_X emissions from boilers No. 9, No. 10, and the temporary rental boiler in accordance with 40 CFR 60.49b.

(b) To document **the** compliance **status** with Condition D.5.3(d), the Permittee shall maintain monthly records of the following:

(1) total natural gas usage for boilers No. 1 through No. 8;

(2) natural gas usage for the temporary rental boiler;

(3) total natural gas usage for boilers No. 9 and No. 10; and

(4) calculated NO_X emissions using the equation listed in Condition D.5.3(d).

(c) To document **the** compliance **status** with Condition D.5.4, the Permittee shall maintain monthly records of the total natural gas usage for boilers No. 1 through No. 10 and the temporary rental boiler.

(d) To document **the** compliance **status** with Condition D.5.2, the Permittee shall maintain records in accordance with Section C - Sulfur Dioxide (SO_2) Record Keeping Requirements (Entire Source).

(e) ~~All records shall be maintained in accordance with~~**.** Section C - General Record Keeping Requirements ~~of this permit~~ **contains the Permittee's obligations with regard to the records required by this condition.**

D.5.13 Reporting Requirements

(a) A quarterly summary report to document compliance with condition D.5.2 shall be submitted ~~to IDEM, in accordance with~~ **not later than thirty (30) days after the end of the quarter being reported.** Section C – Sulfur Dioxide Reporting Requirements (Entire Source) **contains the Permittee's obligation with regard to the reporting required by this condition.** ~~The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

(b) A quarterly summary of the information to document compliance with Conditions D.5.3(d) and D.5.4 shall be submitted ~~to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within~~ **not later than** thirty (30) days after the end of the quarter being reported.

(c) The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.

D.5.14 Natural Gas Fired Boiler Certification

A semi-annual certification shall be submitted ~~to the address listed in Section C - General Reporting Requirements, of this permit, using the Natural Gas Fired Boiler Certification form located at the end of this permit, or its equivalent~~ for the Number 2 Coke Plant Boiler House Boilers Nos. 3, through 10 and the rental natural gas fired boilers. **Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.** The report submitted by the Permittee does require **a** ~~the~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by **a** ~~the~~ "responsible official" as defined by 326 IAC 2-7-1(34).

D.6.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, ~~in accordance with Section B - Preventive Maintenance Plan,~~ is required for these facilities and any associated emission control devices. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

D.6.7 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) ~~Within~~ **Not later than** thirty (30) months after issuance of this permit **(Permit No. T089-7663-00121)** or two and one half (2 ½) years from the date of the ~~last~~ **most recent** compliance test which ever is earlier, in order to demonstrate compliance with Condition D.6.3, the Permittee shall perform simultaneous sampling and analysis of both non-condensable (front half) and condensable (back half) PM_{10} on Sinter Plant Windbox Gas Cleaning Systems Stacks IS6198 and IS6199, using methods as listed in 326 IAC 6.8-4-1(5) or a testing method approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the ~~last~~ **most recent** valid compliance

demonstration. ~~All tests shall be performed in accordance with Section C - Performance Testing.~~

(b) ~~Within~~ **Not later than** thirty (30) months after issuance of this permit **(Permit No. T089-7663-00121)** or two and one half (2 ½) years from the date of the ~~last~~ **most recent** compliance test which ever is earlier, in order to demonstrate compliance with Condition D.6.3, the Permittee shall perform PM_{10} testing on the Discharge Ends Area Baghouse Stacks IS6200, IS6201 and IS6202, using the appropriate methods to measure PM_{10} as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of ~~this~~ **the most recent** valid compliance demonstration. ~~All tests shall be performed in accordance with Section C - Performance Testing.~~

(c) ~~Within~~ **Not later than** thirty (30) months after issuance of this permit **(Permit No. T089-7663-00121)** or five (5) years from the date of the ~~last~~ **most recent** compliance test which ever is earlier, in order to demonstrate compliance with Condition D.6.3, the Permittee shall perform PM_{10} testing of the three (3) Sinter Coolers Stacks IS6203, IS6204 and IS6205, using the appropriate methods to measure PM_{10} as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of ~~this~~ **the most recent** valid compliance demonstration. ~~All tests shall be performed in accordance with Section C - Performance Testing.~~

(d) ~~Within~~ **Not later than** thirty (30) months after issuance of this permit or five (5) years from the date of the ~~last~~ **most recent** compliance test which ever is earlier, in order to demonstrate compliance with Condition D.6.4, the Permittee shall perform SO_2 testing on Sinter Windbox Gas Cleaning Systems Stacks IS6198 and IS6199, using methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the ~~last~~ **most recent** valid compliance demonstration. ~~All tests shall be performed in accordance with Section C - Performance Testing.~~

(e) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation wtih regard to the performance testing required by this condition.

D.6.9 Visible Emissions Notations

* * *

(e) If abnormal emissions are observed, the Permittee shall take reasonable response ~~steps in accordance with~~**.** Section C - Response to Excursions or Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition** . Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~ shall be considered a deviation of this permit.

(f) The Permittee shall comply with the most current Continuous Compliance Plan visible emission evaluation program, ~~in accordance with~~**.** Section C - Continuous Compliance Plan **contains the Permittee's obligation with regard to the visible emission evaluation program required by this condition.**

D.6.10 Parametric Monitoring

(a) The Permittee shall record the pressure drop and liquid reagent flow rate of the dry ventri scrubbers used in conjunction with the No. 3 Sinter Plant Sinter Strand Windbox Gas Cleaning Systems at least once per day when the No. 3 Sinter Plant Sinter Strand Windbox units are in operation. When for any one reading, the pressure drop across the

scrubbers is outside the range of 3 to 8 inches of water and the flow rate of the scrubber is outside the range of 400 to 600 gallons per minute (gpm) or a range established during the latest stack test, the Permittee shall take reasonable response ~~steps in accordance with~~**.** Section C - Response to Excursions or Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. A pressure drop or flow rate that is outside the above mentioned ranges is not a deviation from this permit. Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~, shall be considered a deviation of this permit.

(b) The Permittee shall record the pressure drop of the baghouse used in conjunction with the No. 3 Sinter Plant Discharge Ends Area at least once per day when the No. 3 Sinter Plant Discharge Ends Area is in operation. When for any one reading, the pressure drop across the baghouse is outside the range of 3 to 8 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response ~~steps in accordance with~~**.** Section C - Response to Excursions or Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~, shall be considered a deviation of this permit.

(c) The Permittee shall record the pressure drop of the baghouse used in conjunction with the No. 3 Sinter Plant Cold Screen Station at least once per day when the No. 3 Sinter Plant Cold Screen Station is in operation. When for any one reading, the pressure drop across the baghouse is outside the range of 3 to 8 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response ~~steps in accordance with~~. Section C - Response to Excursions or Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~, shall be considered a deviation of this permit.

(d) The Permittee shall comply with the most current Continuous Compliance Plan for the baghouse operation, recording and maintenance~~, in accordance with~~. Section C - Continuous Compliance Plan **contains the Permittee's obligation with regards to the baghouse operation, recording and maintenance required by this condition.**

(e) The instruments used for determining the pressure drop and flow rate shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months **or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.**

D.6.14 General Record Keeping Requirements

(a) To document **the** compliance **status** with Condition D.6.2 and pursuant to Significant Source Modification 089-12880-00121, issued on July 26, 2001, the Permittee shall maintain records of the Coke oven gas and natural gas usage in the No. 3 Sinter Plant Strand Windbox gas reheat burners ISB001, ISB002 and ISB003.

(b) To document **the** compliance **status** with Condition D.6.4, the Permittee shall maintain records in accordance with Section C – Sulfur Dioxide (SO_2) Record Keeping (Entire Source).

(c) To document **the** compliance **status** with Condition D.6.5, the Permittee shall maintain the following records:

(1) Records of the VOC emissions monitoring data for the period May 1 through September 30, as follows:

(A) The VOC emitted each day.

(B) The cumulative total of VOC emitted.

(C) The sinter produced each operating day.

(2) Maintain records of the VOC continuous emissions monitor system (CEMS) as required in 326 IAC 3-5.

(d) To document **the** compliance **status** with Condition D.6.9 the Permittee shall maintain records of once per day visible emission notations of the Sinter Cooler Stacks IS6203, IS6204 and IS6205 exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(e) To document **the** compliance **status** with Condition D.6.10, the Permittee shall maintain the records of the Sinter Plant Windbox Gas Cleaning system pressure drop across the baghouse; pressure drop and flow rate of the Sinter Plant Windbox Gas Cleaning Scrubbers; pressure drop across the Cold Screen Station Baghouse and pressure drop across the Discharge Ends Area baghouse during normal operation on at least a once per day basis. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g. the process did not operate that day).

(f) Section C - General Record Keeping Requirements ~~of this permit~~ **contains the Permittee's obligations with regard to the records required by this condition.**

D.6.15 General Reporting Requirements

(a) Pursuant to Significant Source modification 089-12880-00121, a quarterly summary of the natural gas and coke oven gas usage at the No. 3 Sinter Plant Sinter Strands Windbox recirculating burners per 12-consecutive month period with compliance demonstrated at the end of each month to document **the** compliance **status** with Conditions D.6.2, shall be submitted ~~to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within~~ **not later than** thirty (30) days after the end of the quarter being reported.

(b) Pursuant to 326 IAC 8-13-8(a)(3), reports to document **the** compliance **status** with Condition D.6.5, shall be as follows:

(1) For VOC Continuous Emissions Monitoring System (CEMS), the following reports shall be submitted:

(A) A report shall be submitted within thirty (30) days of an exceedance of VOC emission limits in D.6.6 containing the following information:

(i) The name and location of the source.

(ii) The nature of the exceedance.

(iii) The date of the occurrence.

(iv) The cause of the exceedance, such as, but not limited to, production rates or characteristics of the sinter burden.

(v) The corrective action taken according to the corrective action plan in 326 IAC 8-13-4(b)(5).

(B) Submit the CEM certification reports according to the procedures and schedule in 326 IAC 3-5.

(c) A quarterly summary report to document **the** compliance **status** with condition D.6.4 shall be ~~submitted to IDEM,~~ **not later than thirty (30) days after the end of the quarter being reported.** ~~in accordance with~~ Section C – Sulfur Dioxide (SO_2) Reporting Requirements (Entire Source) **contains the Permittee's obligation with regard to the reporting required by this condition.**

(d) The reports submitted by the Permittee do require **a** ~~the~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by **a** ~~the~~ "responsible official" as defined by 326 IAC 2-7-1(34).

D.7.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Preventive Maintenance Plan, ~~in accordance with Section B - Preventive Maintenance Plan of this permit,~~ is required for these facilities and any associated control devices. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

Compliance Determination Requirements

D.7.11 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) ~~Within~~ **not later than** thirty (30) months after issuance of this permit **(Permit No. T089-7663-00121)** or two and one half (2 ½) years from the date of the ~~last~~ **most recent** valid compliance demonstration which ever is earlier, in order to demonstrate compliance with Condition D.7.7, the Permittee shall perform PM_{10} testing on the No. 14 Blast Furnace Casthouse Baghouse Stack ID6187 using the appropriate methods to measure PM_{10} as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every two and one half (2 ½) years from the date of ~~this~~ **the most recent** valid compliance demonstration. ~~All tests shall be performed in accordance with Section C - Performance Testing.~~

(b) ~~Within~~ **not later than** 60 days after achieving the maximum capacity but no later than 180 days after startup of Blast Furnace No. 14 Stockhouse Baghouse, in order to demonstrate compliance with Conditions D.7.2 and D.7.7(c), the Permittee shall perform PM, PM_{10}, and $PM_{2.5}$ testing on the Blast Furnace No. 14 Stockhouse Baghouse using methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years ~~after completion~~ **from the date** of the most recent valid compliance stack test. ~~Testing shall be conducted in accordance with Section C - Performance Testing.~~

(c) In lieu of performing the initial compliance tests for PM_{10} and $PM_{2.5}$ in accordance with the schedules set forth in Condition D.7.11(b), should the new or revised condensable PM test method(s) referenced in the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5), signed on May 8, 2009, fail to be published at the time of the required PM_{10} and $PM_{2.5}$ testing, the Permittee may elect to test for PM_{10} and $PM_{2.5}$ within 180 after issuance of the new or revised condensable PM test method(s). Subsequent testing for PM_{10} and $PM_{2.5}$ shall not be effected by this condition and shall be performed in accordance with Conditions D.7.11(b).

(d) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation wtih regard to the performance testing required by this condition.

D.7.12 Sulfur Fuel Sampling and Analysis [326 IAC 7-4-1.1(d)]

To demonstrate compliance with condition D.7.9, the Permittee shall perform ~~the~~ Sulfur Fuel Sampling and Analysis ~~in accordance with~~**.** Section C - Sulfur Fuel Sampling and Analysis **contains the Permittee's obligation with regard to the sampling and analysis required by this condition** ~~of this permit~~.

D.7.15 Visible Emissions Notations

* * *

(e) If abnormal emissions are observed, the Permittee shall take reasonable response ~~steps in accordance with~~**.** Section C - Response to Excursions or Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition** . Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~ shall be considered a deviation of this permit.

(f) The Permittee shall comply with the most current Continuous Compliance Plan visible emission evaluation program~~, in accordance with~~**.** Section C - Continuous Compliance Plan **contains the Permittee's obligation with regard to the visible emission evaluation program required by this condition.**

D.7.16 Parametric Monitoring

(a) The Permittee shall record the pressure drop across the No. 14 Blast Furnace Cast house baghouse ID3185, at least once per day when the No. 14 Blast Furnace Casthouse is in operation. When for any one reading, the pressure drop across the baghouses is outside the normal range of 3 to 9 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response ~~steps in accordance with~~**.** Section C - Response to Excursions and Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition** . A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps ~~in accordance with Section C - Response to Excursions and Exceedances~~, shall be considered a deviation of this permit.

(b) The Permittee shall record the pressure drop across the Blast Furnace No. 14 Stockhouse Baghouse, at least once per day when the No. 14 Blast Furnace Stockhouse processes are in operation. When for any one reading, the pressure drop across the baghouses is outside the normal range of 3 to 9 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response ~~steps in accordance with~~**.** Section C - Response to Excursions and Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps ~~in accordance with Section C - Response to Excursions and Exceedances~~, shall be considered a deviation of this permit.

(c) The Permittee shall comply with the most current Continuous Compliance Plan for the baghouse operation, recording and maintenance~~, in accordance with~~. Section C - Continuous Compliance Plan **contains the Permittee's obligation with regard to the baghouse operation, recording and maintenance required by this condition.**

(d) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months **or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.**

D.7.17 General Record Keeping Requirements

(a) To document **the** compliance **status** with Condition D.7.1, the Permittee shall maintain records at the plant of the total tons of slag processed in the granulation plant per twelve (12) consecutive month period.

(b) To document **the** compliance **status** with Condition D.7.8, the Permittee shall maintain records in accordance with Section C – Sulfur Dioxide SO_2 Record Keeping (Entire Source).

(c) To document **the** compliance **status** with Condition D.7.15, the Permittee shall maintain records of once per day visible emission notations of the No. 14 Casthouse Baghouse Stack (ID6187), the Blast Furnace No. 14 Stockhouse Baghouse exhaust stack (IDSH0367), the iron beaching facility, quenching hooded exhaust, transferring, conveying operations, and loadout bay when in operation. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(d) To document **the** compliance **status** with Condition D.7.16, the Permittee shall maintain the records of the once per day pressure drop of the No. 14 Casthouse Baghouse and the Blast Furnace No. 14 Stockhouse Baghouse during normal operation. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g. the process did not operate that day).

(e) ~~All records shall be maintained in accordance with~~**.** Section C - General Record Keeping Requirements ~~of this permit~~ **contains the Permittee's obligations with regard to the records required by this condition.**

D.7.18 General Reporting Requirements

A quarterly summary report to document **the** compliance **status** with condition D.7.1 and D.7.8 shall be submitted ~~to IDEM in accordance with Section C – General Reporting Requirements and Sulfur Dioxide SO_2 Reporting Requirements (Entire Source), of this permit, using the reporting forms located at the end of this permit, or their equivalent, within~~ **not later than** thirty (30) days after the end of the quarter being reported. **Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.** The report submitted by the Permittee does require **a** ~~the~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by **a** ~~the~~ "responsible official" as defined by 326 IAC 2-7-1(34).

D.8.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, ~~in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for these facilities and any associated control devices. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

D.8.8 Particulate Matter Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) ~~Within~~ **Not later than** thirty (30) months after issuance of this permit **(Permit No. T089-7663-00121)** or five (5) years from the date of the ~~last~~ **most recent** compliance test which ever is earlier, in order to demonstrate compliance with Condition D.8.3, the Permittee shall perform PM_{10} testing on the No. 1 BOP Desulfurization Baghouse discharge using the appropriate methods to measure PM_{10} as listed in 326 IAC 6.8-4-1(1) or other

methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of ~~this~~ **the most recent** valid compliance demonstration. ~~All tests shall be performed in accordance with Section C - Performance Testing.~~

(b) ~~Within~~ **Not later than** thirty (30) months after issuance of this permit **(Permit No. T089-7663-00121)** or two and one-half (2 ½) years from the date of the ~~last~~ **most recent** compliance test which ever is earlier, in order to demonstrate compliance with Condition D.8.3, the Permittee shall perform PM_{10} testing on the No. 1 BOP Gas Cleaning Systems Stacks SS6102 and SS6103 the appropriate methods to measure PM_{10} as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of ~~this~~ **the most recent** valid compliance demonstration. ~~All tests shall be performed in accordance with Section C - Performance Testing.~~

(c) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation wtih regard to the performance testing required by this condition.

D.8.9 Sulfur Dioxide Testing Requirements

(a) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, within thirty (30) months after issuance of this permit **(Permit No. T089-7663-00121)** or two and one-half (2 ½) years from the date of the ~~last~~ **most recent** valid compliance test whichever is earlier or an alternative date as determined by OAQ, Compliance Data Section, the Permittee shall perform SO_2 emission testing on the No. 1 and No. 2 Hot Metal Desulfurization station baghouse discharge utilizing the test method 40 CFR 60, Appendix A Method 6C or other methods as submitted in accordance with the U.S. EPA Administrative Consent Order, issued January 2, 2004, to show compliance with condition D.8.7(a). This test shall be repeated at least once every two and one-half (2 ½) years from the date of ~~this~~ **the most recent** valid compliance demonstration.

(b) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, within thirty (30) months after issuance of this permit **(Permit No. T089-7663-00121)** or two and one-half (2 ½) years from the date of the ~~last~~ **most recent** valid compliance test whichever is earlier or an alternative date as determined by OAQ, Compliance Data Section , the Permittee shall perform SO_2 emission testing on the No. 1 and No. 2 Hot Metal Desulfurization Station Baghouse discharge utilizing the test method 40 CFR 60, Appendix A Method 6C or other methods as submitted in accordance with the U.S. EPA Administrative Consent Order, issued January 2, 2004, to demonstrate compliance with condition D.8.7(b) during the desulfurization reagent injection only. This test shall be repeated at least once every two and one-half (2 ½) years from the date of ~~this~~ **the most recent** valid compliance demonstration.

(c) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004 demonstration of compliance by performance testing per D.8.9 (b) above shall not fulfill the compliance demonstration requirement for D.8.9(a).

(d) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation wtih regard to the performance testing required by this condition.

D.8.11 Visible Emissions Notations

* * *

(e) If abnormal emissions are observed, the Permittee shall take reasonable response ~~steps in accordance with~~**.** Section C - Response to Excursions or Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition** . Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~ shall be considered a deviation from this permit.

(f) The Permittee shall comply with the most current Continuous Compliance Plan visible emission evaluation program~~, in accordance with~~**.** Section C - Continuous Compliance Plan **contains the Permittee's obligation with regard to the visible emission evaluation program required by this condition.**

D.8.12 Parametric Monitoring

(a) The Permittee shall record the pressure drop across the CASBell/OB Lancing Stations baghouse SS3105 used in conjunction with the CASBell/OB Lancing Stations, at least once per day when the CASBell/OB Lancing Stations are in operation. When for any one reading, the pressure drop across the baghouses is outside the normal range of 2.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response ~~steps in accordance with~~. Section C - Response to Excursions or Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~, shall be considered a deviation of this permit.

(b) The Permittee shall record the pressure drop and flow rate of the scrubbers used in conjunction with the three (3) BOP vessels M, E, and D, at least once per day when the three (3) BOP vessels M, E, and D units are in operation. When for any one reading, the pressure drop across the scrubbers is outside the normal range of 50.0 and 90.0 inches of water or the flow rate of the scrubbers is outside the range of 2500 and 4500 gallons per minute (gpm) or ranges established during the latest stack test, the Permittee shall take reasonable response ~~steps in accordance with~~**.** Section C - Response to Excursions or Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. A reading that is outside the above mentioned ranges for respective parameters is not a deviation from this permit. Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~, shall be considered a deviation of this permit.

(c) The Permittee shall record the pressure drop across the Hot Metal Transfer and Desulfurization Baghouse SS3100 used in conjunction with the No. 1 BOP Hot Metal Desulfurization stations, at least once per day when the No. 1 BOP Hot Metal Desulfurization Stations are in operation. When for any one reading, the pressure drop across the baghouses is outside the normal range of 2 to 10 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response ~~steps in accordance with~~**.** Section C - Response to Excursions or Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~, shall be considered a deviation of this permit.

(d) The Permittee shall comply with the most current Continuous Compliance Plan for the baghouse operation, recording and maintenance~~, in accordance with~~. Section C - Continuous Compliance Plan **contains the Permittee's obligation with regard to the baghouse operation, recording and maintenance required by this condition.**

(e) The instruments used for determining the pressure and flow rate shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months **or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.**

* * *

D.8.14 General Record Keeping Requirements

(a) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, and in order to document **the** compliance **status** with Condition D.8.6, the Permittee shall keep records of the monthly hot metal throughput for the No. 1 and No. 2 Hot Metal Transfer and Desulfurization Stations.

(b) To document **the** compliance **status** with Visible Emission Notations, Condition D.8.11, the Permittee shall maintain records of once per day visible emission notations of the Hot Metal Desulfurization Baghouse Stack SS6101, the BOP Gas Cleaning System Stacks SS6102 and SS6103 and the CASBell/OB Lancing Station Baghouse Stacks SS6104 exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(c) To document **the** compliance **status** with Condition D.8.12, the Permittee shall maintain records of the parametric monitoring CASBell/OB Lancing Station Baghouse SS3105 and Hot Metal Transfer and Desulfurization Baghouse SS3100 total static pressure drop, and No. 1 BOP Shop Gas Cleaning System scrubbers, pressure drop across the venturi throats and scrubber supply water flow rate once per day during normal operation. The Permittee shall include in its daily record when a pressure drop reading and/or flow rate reading is not taken and the reason for the lack of pressure drop reading and/or flow rate reading (e.g. the process did not operate that day).

(d) ~~All records shall be maintained in accordance with~~ Section C - General Record Keeping Requirements ~~of this permit~~ **contains the Permittee's obligations with regard to the records required by this condition.**

D.9.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, ~~in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for these facilities and any associated control devices. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

D.9.9 Particulate Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) ~~Within~~ **Not later than** thirty (30) months after issuance of this permit **(Permit No. T089-7663-00121)** or five (5) years from the date of the ~~last~~ **most recent** compliance test which ever is earlier, in order to demonstrate compliance with Condition D.9.2, the Permittee shall perform PM_{10} testing on the Number 2 Q-BOP Hot Metal Transfer and Desulfurization Stations Baghouse discharge using the appropriate methods to measure PM_{10} as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of ~~this~~ **the most recent** valid compliance demonstration. ~~All tests shall be performed in accordance with Section C - Performance Testing.~~

(b) ~~Within~~ **Not later than** thirty (30) months after issuance of this permit **(Permit No. T089-7663-00121)** or two and one half (2 ½) years from the date of the ~~last~~ **most recent** compliance test which ever is earlier, in order to demonstrate compliance with Condition D.9.2, the Permittee shall perform PM_{10} testing on the Number 2 Q-BOP Gas Cleaning

System stacks NS6124 and NS6125 using the appropriate methods to measure PM_{10} as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of ~~this~~ **the most recent** valid compliance demonstration. ~~All tests shall be performed in accordance with Section C - Performance Testing.~~

(c) ~~Within~~ **Not later than** thirty (30) months after issuance of this permit **(Permit No. T089-7663-00121)** or two and one half (2 ½) years from the date of the ~~last~~ **most recent** compliance test which ever is earlier, in order to demonstrate compliance with Condition D.9.2 the Permittee shall perform PM_{10} testing on the Number 2 Q-BOP Secondary Emissions Baghouse Stack NS6123, using the appropriate methods to measure PM_{10} as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of ~~this~~ **the most recent** valid compliance demonstration. ~~All tests shall be performed in accordance with Section C - Performance Testing.~~

(d) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation wtih regard to the performance testing required by this condition.

D.9.10 Sulfur Dioxide (SO_2) Testing Requirements

(a) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004 , within thirty (30) months after issuance of this permit **(Permit No. T089-7663-00121)** or two and one-half (2 ½) years from the date of the ~~last~~ **most recent** valid compliance test whichever is earlier or an alternative date as determined by OAQ, Compliance Data Section, the Permittee shall perform SO_2 emission testing on the No. 2 QBOP Shop Hot Metal Transfer and Desulfurization Stations Baghouse discharge during hot metal transfer, hot metal desulfurization, reagent injection and hot metal skimming operations, utilizing the test protocol submitted in accordance with the U.S. EPA Administrative Consent Order, issued January 2, 2004, to show compliance with condition D.9.7(a). This test shall be repeated at least once every two and one-half (2 ½) years from the date of ~~this~~ **the most recent** valid compliance demonstration.

(b) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, within thirty (30) months after issuance of this permit **(Permit No. T089-7663-00121)** or two and one-half (2 ½) years from the date of the ~~last~~ **most recent** valid compliance test whichever is earlier or an alternative date as determined by OAQ, Compliance Data Section, the Permittee shall perform SO_2 emission testing on the No. 2 QBOP Shop Hot Metal Transfer and desulfurization station baghouse discharge during reagent injection operations only utilizing a test method approved by the Commissioner to show compliance with condition D.9.6(b) during the desulfurization reagent injection only. This test shall be repeated at least once every two and one-half (2 ½) years from the date of ~~this~~ **the most recent** valid compliance demonstration.

(c) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, demonstration of compliance by performance testing per D.9.10(b) above shall not fulfill the compliance demonstration requirement for D.9.10(a).

(d) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation wtih regard to the performance testing required by this condition.

* * *

D.9.13 Visible Emissions Notations

* * *

(e) If abnormal emissions are observed, the Permittee shall take reasonable response ~~steps in accordance with~~**.** Section C - Response to Excursions or Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~, shall be considered a deviation of this permit.

(f) The Permittee shall comply with the most current Continuous Compliance Plan visible emission evaluation program, ~~in accordance with~~**.** Section C - Continuous Compliance Plan **contains the Permittee's obligation with regard to the visible emission evaluation program required by this condition.**

D.9.14 Parametric Monitoring

(a) The Permittee shall record the pressure drop across the No. 2 QBOP Secondary Emissions baghouse NS3124 used in conjunction with the secondary emissions from the three (3) Q-BOP vessels T, W, and Y, at least once per day, when any of the three (3) Q-BOP vessels T, W, and Y, is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2 and 10 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response ~~steps in accordance with~~**.** Section C - Response to Excursions or Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~, shall be considered a deviation of this permit.

(b) The Permittee shall record the pressure drop across the venture scrubber throats and scrubber total supply water flow rate of the No. 2 Q-BOP gas cleaning Systems scrubbers NS3125 and NS3126 used in conjunction with the 3 No. 2 Q-BOP vessels at least once per day when either the three (3) Q-BOP vessels T, W, and Y units is operating. For each scrubber system, when for any one reading across the venture scrubber throats is outside the normal range of 50 to 70 inches of water or the scrubber supply water flow rate is outside the normal range of 2,000 and 4,500 gallons per minute (gpm) or ranges established during the latest stack test, the Permittee shall take reasonable response ~~steps in accordance with~~**.** Section C - Response to Excursions or Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. A reading that is outside the above mentioned ranges for respective parameters is not a deviation from this permit. Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~, shall be considered a deviation of this permit.

(c) The Permittee shall record the pressure drop across the Hot Metal Desulfurization baghouse NS3115 used in conjunction with the No, 2 Q-BOP Hot Metal Desulfurization stations and mixers, at least once per day when the desulfurization stations and mixers are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response ~~steps in accordance with~~**.** Section C - Response to Excursions or Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~, shall be considered a deviation of this permit.

(d) The Permittee shall comply with the most current Continuous Compliance Plan for the baghouse operation, recording and maintenance~~, in accordance with~~**.** Section C - Continuous Compliance Plan **contains the Permittee's obligation with regard to the baghouse operation, recording and maintenance required by this condition.**

(e) The instrument used for determining the pressure and flow rate shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months **or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.**

D.9.16 General Record Keeping Requirements

(a) Pursuant to the U.S. EPA Administrative Consent Order, issued January 2, 2004, and to document **the** compliance **status** with Condition D.9.6, the Permittee shall keep records of the monthly hot metal throughput for the No. 1 and No. 2 Hot Metal Desulfurization Stations.

(b) To document **the** compliance **status** with Condition D.9.13 the Permittee shall maintain the records of once per day visible emission notations of the Hot Metal Transfer and Desulfurization Stations baghouse discharge NS6144, No. 2 QBOP Secondary Emissions Baghouse Stack NS6123, and No. 2 Q-BOP Gas Cleaning System Stacks NS6124 and NS6125 exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(c) To document **the** compliance **status** with Condition D.9.14, the Permittee shall maintain records of the once per day of the pressure drop of the No. 2 QBOP secondary emissions baghouse NS3124, pressure drop across the venturi scrubber throats and supply water flow rate of the No. 2 QBOP Gas cleaning systems scrubbers NS3125 and NS3126, and pressure drop of the Hot Metal Transfer and Desulfurization baghouse NS3115, during normal operation. The Permittee shall include in its daily record when a pressure drop reading and/or flow rate reading is not taken and the reason for the lack of pressure drop reading and/or flow rate reading (e.g. the process did not operate that day).

(d) ~~All records shall be maintained in accordance with~~ Section C - General Record Keeping Requirements ~~of this permit~~ **contains the Permittee's obligations with regard to the records required by this condition.**

D.10.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, ~~in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for these facilities and any associated control devices. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

D.10.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

~~Within~~ **Not later than** thirty (30) months after issuance of this permit **(Permit No. T089-7663-00121)**, or an alternative date as determined by OAQ, Compliance Data Section, in order to comply with condition D.1.1, the Permittee shall perform PM_{10} testing on one of the Nos. 1, 2, 3 and 4 Continuous Reheat Furnace stacks RM6500, RM6501, RM6502 or RM6503, using methods as listed in 326 IAC 6.8-4-1(1) or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the ~~last~~ **most recent** valid compliance demonstration with no stack being tested in successive tests. ~~All tests~~ **Testing** shall be performed in accordance with **provisions of 326 IAC 3-6 (Source Sampling Procedures).** Section C - Performance Testing **contains the Permittee's obligation wtih regard to the performance testing required by this condition**.

D.10.5 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2]

Pursuant to 326 IAC 7-4.1-2, and in order to comply with conditions D.10.2, the Permittee shall perform ~~the~~ Sulfur Fuel Sampling and Analysis**.** ~~in accordance with~~**.** Section C - Sulfur Fuel Sampling and Analysis **contains the Permittee's obligation with regard to the sampling and analysis required by this condition** ~~of this permit~~.

D.10.6 Record Keeping Requirements

(a) To document **the** compliance **status** with Condition D.10.2, the Permittee shall maintain records in accordance with Section C - Sulfur Dioxide (SO_2) Record Keeping Requirements (Entire Source).

(b) ~~All records shall be maintained in accordance with~~**.** Section C - General Record Keeping Requirements ~~of this permit~~ **contains the Permittee's obligations with regard to the records required by this condition.**

D.10.7 Reporting Requirements

A quarterly summary report to document **the** compliance **status** with condition D.10.2 shall be submitted ~~to IDEM accordance with~~ **not later than thirty (30) days after the end of the quarter being reported.** Section C – Sulfur Dioxide SO_2 Reporting Requirements (Entire Source) **contains the Permittee's obligation with regard to the reporting required by this condition**. The report submitted by the Permittee does require **a** ~~the~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by **a** ~~the~~ "responsible official" as defined by 326 IAC 2-7-1(34).

D.11.9 Record Keeping Requirements [40 CFR Part 63.1165]

(a) To document **the** compliance **status** with Conditions D.11.2 and D.11.3, the Permittee shall maintain the following records pursuant to 40 CFR 63.1165:

* * *

(c) ~~All records shall be maintained in accordance with~~**.** Section C - General Record Keeping Requirements ~~of this permit~~ **contains the Permittee's obligations with regard to the records required by this condition.**

D.11.10 Reporting Requirements [40 CFR 63.1164]

* * *

(d) ~~All reports shall be submitted in accordance with~~ Section C - General Reporting Requirements **contains the Permittee's obligation with regard to the reporting required by this condition.**

(e) The reports submitted by the Permittee does require **a** ~~the~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by **a** ~~the~~ "responsible official" as defined by 326 IAC 2-7-1(34).

D.12.6 Preventative Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, ~~in accordance with Section B - Preventive Maintenance Plan,~~ of this permit is required for EGL Boiler House Boiler No. 1. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

D.12.7 Record Keeping Requirements

(a) Pursuant to Minor Source Modification 089-14424-00121, issued August 2, 2001 (modified by MSM 089-15694-00121, issued August 21, 2002), and 40 CFR 60.40c the

Permittee shall record and maintain monthly records of the amounts of fuel combusted for the one (1) 39.147 million British thermal units per hour (MMBtu/hr) natural gas fired boiler, identified as EGL-1 boiler.

(b) Pursuant to Minor Source Modification 089-8606-00121, issued October 20, 1997 and to document **the** compliance **status** with Condition D.12.4 the Permittee shall maintain monthly records of the natural gas usage in the two (2) hydrogen atmosphere batch annealing furnaces.

(c) ~~All records shall be maintained in accordance with~~**.** Section C - General Record Keeping Requirements ~~of this permit~~ **contains the Permittee's obligations with regard to the records required by this condition.**

D.12.8 Reporting Requirements

(a) Pursuant to Minor Source Modification 089-8606-00121, issued October 20, 1997 and to document **the** compliance **status** with Condition D.12.4 the Permittee shall submit ~~within~~ **not later than** thirty (30) days **after** ~~of~~ the end of ~~each calendar~~ **the** quarter **being reported**, the hydrogen atmosphere batch annealing furnaces monthly natural gas usage~~, using the reporting form located at the end of this permit or its equivalent~~.

(b) ~~All reports shall be submitted in accordance with~~ Section C - General Reporting Requirements ~~of this permit~~ **contains the Permittee's obligation with regard to the reporting required by this condition**.

(c) The reports submitted by the Permittee do require **a** ~~the~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by **a** ~~the~~ "responsible official" as defined by 326 IAC 2-7-1(34).

D.13.3 Record Keeping Requirements

(a) In order to ~~demonstrate~~ **document the** compliance **status** with conditions D.13.1 and D.13.2, the Permittee shall maintain records of the natural gas usage of the furnaces.

(b) ~~All records shall be maintained in accordance with~~**.** Section C - General Record Keeping Requirements ~~of this permit~~ **contains the Permittee's obligations with regard to the records required by this condition**.

D.14.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, ~~in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for these facilities. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

Compliance Determination Requirements

D.14.4 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2]

Pursuant to 326 IAC 7-4.1-2, and in order to comply with conditions D.14.1, , the Permittee shall perform ~~the~~ Sulfur Fuel Sampling and Analysis**.** ~~in accordance with~~ Section C - Sulfur Fuel Sampling and Analysis **contains the Permittee's obligation with regard to the sampling and analysis required by this condition** ~~of this permit~~.

D.14.5 Visible Emission Notations

* * *

(e) If abnormal emissions are observed, the Permittee shall take reasonable response ~~steps in accordance with~~**.** Section C - Response to Excursions or Exceedances **contains the**

Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~ shall be considered a deviation of this permit.

D.14.6 Record Keeping Requirements

(a) To document **the** compliance **status** with Condition D.14.2, the Permittee shall maintain records in accordance with Section C - Sulfur Dioxide (SO_2) Record Keeping Requirements (Entire Source).

(b) To document **the** compliance **status** with Conditions D.14.5, the Permittee shall maintain records of the once per day visible emission notations when Boilers No. 1 and/or No. 2 combust fuel oil or any combination of fuel oil and natural gas or blast furnace gas.

(c) ~~All records shall be maintained in accordance with~~**.** Section C - General Record Keeping Requirements ~~of this permit~~ **contains the Permittee's obligations with regard to the records required by this condition**.

D.14.7 Reporting Requirements

A quarterly summary report to document **the** compliance **status** with conditions D.14.2 shall be submitted in accordance with Section C – Sulfur Dioxide Reporting Requirements (Entire Source) of this permit. **Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.** This report does require **a** ~~the~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by **a** ~~the~~ "responsible official" as defined by 326 IAC 2-7-1(34).

D.14.8 Natural Gas Fired Boiler Certification

A semi-annual certification shall be submitted ~~to the address listed in Section C - General Reporting Requirements, of this permit, using the Natural Gas Fired Boiler Certification form located at the end of this permit, or its equivalent,~~ for the Number 4 Boiler House Boilers Nos. 1, 2 and 3, five hundred (500) million British Thermal unit per hour (MMBtu/hr) natural gas fired boilers. ~~This report shall be submitted in accordance with~~ Section C - General Reporting Requirements ~~of this permit~~ **contains the Permittee's obligation with regard to the reporting required by this condition**. This report does require **a** ~~the~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by **a** ~~the~~ "responsible official" as defined by 326 IAC 2-7-1(34).

D.15.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, ~~in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for these facilities. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

D.15.8 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) ~~Within~~ **Not later than** twelve (12) months after issuance of this permit **(Permit No. T089-7663-00121)** or two and one-half (2 ½) years from the date of the ~~last~~ **most recent** compliance test which ever is earlier, in order to demonstrate compliance with Condition D.15.3, the Permittee shall perform PM_{10} testing on the Turboblower Boiler House Boilers Nos. 1, 2, 3 and 5 when all four boilers are operating, using methods as listed in 326 IAC 6.8-4-1 or other methods approved by the Commissioner. This test shall be repeated at least once every two and one-half (2 ½) years from the date of ~~this~~ **the most recent** valid compliance demonstration. ~~All tests shall be performed in accordance with Section C - Performance Testing.~~

(b) ~~Within~~ **Not later than** twelve (12) months after issuance of this permit **(Permit No. T089-7663-00121)** or two and one-half (2 ½) years from the date of the ~~last~~ **most recent**

compliance test which ever is earlier, in order to demonstrate compliance with Condition D.15.3, the Permittee shall perform PM_{10} testing on the Turboblower Boiler House Boiler No. 4A when burning natural gas alone and when burning coke oven gas alone, using methods as listed in 326 IAC 6.8-4-1 or other methods approved by the Commissioner. This test shall be repeated at least once every two and one-half (2 ½) years from the date of ~~this~~ **the most recent** valid compliance demonstration. ~~All tests shall be performed in accordance with Section C - Performance Testing.~~

(c) ~~Within~~ **Not later than** twelve (12) months after issuance of this permit **(Permit No. T089-7663-00121)** or two and one-half (2 ½) years from the date of the ~~last~~ **most recent** compliance test which ever is earlier, in order to demonstrate compliance with Condition D.15.3, the Permittee shall perform PM_{10} testing on the Turboblower Boiler House Boiler No. 6 when burning blast furnace gas on the main burners alone and natural gas on the pilots, using methods as listed in 326 IAC 6.8-4-1 or other methods approved by the Commissioner. This test shall be repeated at least once every two and one-half (2 ½) years from the date of ~~this~~ **the most recent** valid compliance demonstration. ~~All tests shall be performed in accordance with Section C - Performance Testing.~~

(d) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation wtih regard to the performance testing required by this condition.

D.15.9 Sulfur Fuel Sampling and Analysis [326 IAC 7-4.1-2]

Pursuant to 326 IAC 7-4.1-2, and in order to comply with conditions D.15.4, the Permittee shall perform ~~the~~ Sulfur Fuel Sampling and Analysis**.** ~~in accordance with~~ Section C - Sulfur Fuel Sampling and Analysis **contains the Permittee's obligation with regard to the sampling and analysis required by this condition** ~~of this permit~~.

D.15.11 Visible Emission Notations

* * *

(e) If abnormal emissions are observed, the Permittee shall take reasonable response ~~steps in accordance with~~**.** Section C - Response to Excursions or Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~ shall be considered a deviation of this permit.

D.15.12 Record Keeping Requirements

(a) To document **the** compliance **status** with Condition D.15.4, the Permittee shall maintain records in accordance with Section C - Sulfur Dioxide (SO_2) Record Keeping Requirements (Entire Source).

(b) To document **the** compliance **status** with condition D.15.5(b), the Permittee shall maintain records of the TBBH Boiler No. 6, natural gas usage.

(c) To document **the** compliance **status** with TBBH Boilers 4A, condition D.15.5(a), the Permittee shall maintain records required under 40 CFR 60.49b(c), (g) and (h), as applicable.

(d) To document **the** compliance **status** with Conditions D.15.11, the Permittee shall maintain records of once per day visible emission notations when any one or combination of Boilers No. 1, No. 2, No. 3 and/or No. 5 combust fuel oil or any combination of fuel oil and natural gas, blast furnace gas or coke oven gas.

(e) ~~All records shall be maintained in accordance with~~**.** Section C - General Record Keeping Requirements ~~of this permit~~ **contains the Permittee's obligations with regard to the records required by this condition.**

D.15.13 Reporting Requirements

(a) To document **the** compliance **status** with conditions D.15.4, the Permittee shall submit a quarterly summary report as specified in Section C – Sulfur Dioxide Reporting (Entire Source) in this permit.

(b) To document **the** compliance **status** with condition D.15.5(b), the Permittee shall submit a report ~~within~~ **not later than** thirty (30) days of the end of the quarter containing the TBBH Boiler No. 6, natural gas usage using the form at the end of this permit or its equivalent.

(c) If the Permittee elects to document **the** compliance **status** with condition D.15.6, either by monitoring of steam generating unit operating conditions or by operating a predictive emission monitoring system (PEMS) for NO_X emissions on No. 4A Boiler, the Permittee shall also submit reports as required under 40 CFR 60.49b(b) and (h).

(d) The Permittee shall submit an excess emissions report, as required by 40 CFR 60.7(c), ~~within~~ **not later than** thirty (30) days of the end of each quarter for Nos. 4A and 6 boilers. ~~In addition to submitting this report to the addresses listed in Section C - General Reporting Requirements~~.

(e) To document **the** compliance **status** with Conditions D.15.11, the Permittee shall maintain records of once per day visible emission notations when Boilers No. 1, No. 2, No. 3 and/or No. 5 combust fuel oil or any combination of fuel oil, and natural gas, blast furnace gas or coke oven gas.

(f) ~~All reports shall be submitted in accordance with~~**.** Section C - General Reporting Requirements ~~of this permit~~ **contains the Permittee's obligation with regard to the reporting required by this condition.**

(g) These reports do require **a** ~~the~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by **a** ~~the~~ "responsible official" as defined by 326 IAC 2-7-1(34).

D.15.14 Natural Gas Fired Boiler Certification

A semi-annual certification shall be submitted ~~to the address listed in Section C - General Reporting Requirements, of this permit, using the Natural Gas Fired Boiler Certification form located at the end of this permit, or its equivalent,~~ for each of the TBBH Boilers Nos. 1, 2 and 3, with heat input of four hundred (400) million British Thermal unit per hour (MMBtu/hr), No. 4A, with a heat input of two hundred forty-four (244) MMBtu/hr, No. 5, with a heat input of four hundred fifty (450) MMBtu/hr and No. 6 with heat input of five hundred (500) million British Thermal unit per hour (MMBtu/hr) natural gas fired boilers. ~~This report shall be submitted in accordance with~~ Section C – General reporting Requirements **contains the Permittee's obligation with regard to the reporting required by this condition.** This report does require **a** ~~the~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by **a** ~~the~~ "responsible official" as defined by 326 IAC 2-7-1(34).

D.16.3 Record Keeping Requirements

* * *

(b) ~~All records shall be maintained in accordance with~~**.** Section C - General Record Keeping Requirements ~~of this permit~~ **contains the Permittee's obligations with regard to the records required by this condition.**

D.16.4 Reporting Requirements

* * *

(b) These reports shall be submitted ~~within~~ **not later** thirty (30) calendar days following the end of ~~each~~ **the** ~~calendar~~ quarter **being reported.** ~~and in accordance with~~**.** Section C – General Reporting Requirements ~~of this permit~~ **contains the Permittee's obligation with regard to the reporting required by this condition.**

E.1.6 Preventive Maintenance Plan

A Preventive Maintenance Plan, ~~in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for the pulverizers, preheaters, dual process separation cyclones and associated baghouses. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

Compliance Determination Requirements

E.1.7 Testing Requirements

~~Within~~ **Not later than** 36 months after issuance of Part 70 Operating Permit No. T089-7171-00169 (issued on July 19, 2006) and in order to comply with conditions E.1.2, E.1.4, and E.1.5 the Permittee shall perform PM/ PM_{10} stack tests on the three pulverization equipment train SS-1 baghouse stacks 1A, 1B and 1C, the three pulverization equipment train SS-2 baghouse stacks 2A, 2B and 2C, or the three pulverization equipment train SS-3, baghouse stacks 3A, 3B and 3C utilizing a testing method approved by the commissioner ~~in accordance with Section C – Performance Testing.~~ PM_{10} includes filterable and condensable PM_{10}. These tests shall be repeated at least once every five years from the date of ~~this~~ **the most recent** valid compliance demonstration. The second five year cycle of tests shall be performed on the three pulverization equipment train baghouse SS-1 stacks 1A, 1B and 1C, the three pulverization equipment train SS-2 baghouse stacks 2A, 2B and 2C or the three pulverization equipment train SS-3 baghouse stacks 3A, 3B and 3C not previously tested**. Testing shall be conducted** in accordance with **the provisions of 326 IAC 3-6 (Source Sampling Procedures).** Section C - Performance Testing **contains the Permittee's obligation wtih regard to the performance testing required by this condition**. The third year cycle of tests shall be performed on the three pulverization equipment train baghouse SS-1 stacks 1A, 1B and 1C, the three pulverization equipment train SS-2 baghouse stacks 2A, 2B and 2C or the three pulverization equipment train SS-3 baghouse stacks 3A, 3B and 3C not previously tested ~~in accordance with Section C- Performance Testing~~. Then the five year cycle of test begins on the first three pulverization equipment train baghouse stacks tested.

E.1.11 Visible Emissions Notations

* * *

(e) If abnormal emissions are observed, the Permittee shall take reasonable response ~~steps in accordance with~~**.** Section C - Response to Excursions or Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. Failure to take response **steps** ~~with Section C - Response to Excursions or Exceedances~~, shall be considered a deviation from this permit.

E.1.12 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouses used in conjunction with each pulverization equipment train, at least once per day when each pulverization equipment train is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response ~~steps in accordance with~~**.** Section C - Response to

Excursions or Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~, shall be considered a deviation of this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ shall be calibrated at least once every six (6) months **or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.**

E.1.13 Record Keeping Requirements

(a) To document **the** compliance **status** with Condition E.1.3, the Permittee shall maintain records of the monthly natural gas usage in the three (3) air preheaters.

(b) To document **the** compliance **status** with Conditions E.1.11, the Permittee shall maintain records of once per day visible emission notations of the three (3) pulverization equipment train baghouse stacks exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(c) To document **the** compliance **status** with Condition E.1.12, the Permittee shall maintain records once per day of the pressure drop during normal operation. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g. the process did not operate that day).

(d) To document **the** compliance **status** with Condition E.1.7, the Permittee shall maintain records of the stacks tested during each five year test cycle.

(e) ~~All records shall be maintained in accordance with~~**.** Section C - General Record Keeping Requirements ~~of this permit~~ **contains the Permittee's obligations with regard to the records required by this condition.**

E.1.14 Reporting Requirements

A quarterly summary of the information to document **the** compliance **status** with conditions E.1.3 shall be submitted ~~to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within~~ **not later than** thirty (30) days after the end of the quarter being reported. **Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.** The report submitted by the Permittee does require **a** ~~the~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by **a** ~~the~~ responsible official.

E.2.5 Preventive Maintenance Plan

A Preventive Maintenance Plan, ~~in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for the pulverized coal transport lines, coal storage reservoir and the associated baghouses. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

E.2.7 Testing Requirements

(a) ~~Within~~ **Not later than** 36 months after issuance of Part 70 Operating Permit No. T089-7171-00169 (issued on July 19, 2006) and in order to comply with conditions E.2.3 and E.2.4 the Permittee shall perform PM/ PM_{10} stack tests on one of the pulverized coal transport stacks SS-5 or SS-6 and the pulverized coal storage reservoir stack SS-7, utilizing a testing method approved by the commissioner ~~in accordance with Section C -~~

~~Performance Testing~~. PM_{10} includes filterable and condensable PM_{10}. These tests shall be repeated at least once every five years from the date of ~~this~~ **the most recent** valid compliance demonstration.

The second five year cycle of tests shall be performed on the pulverized coal transport stacks SS-5 or SS-6 not previously tested and the pulverized coal storage reservoir stack SS-7 ~~in accordance with Section C - Performance Testing~~. PM_{10} includes filterable and condensable PM_{10}. These tests shall be repeated at least once every five years from the date of ~~this~~ **the most recent** valid compliance demonstration.

The next five year test cycle will repeat the first five year cycle of testing.

(b) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation wtih regard to the performance testing required by this condition.

E.2.9 Record Keeping Requirements

(a) To document **the** compliance **status** with Condition E.2.7, the Permittee shall maintain records of the stacks tested during each five year testing cycle.

(b) ~~All records shall be maintained in accordance with~~**.** Section C - General Record Keeping Requirements ~~of this permit~~ **contains the Permittee's obligations with regard to the records required by this condition.**

E.3.3 Preventive Maintenance Plan

A Preventive Maintenance Plan, ~~in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for the railcar heater and any control devices. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

E.3.4 Record Keeping Requirements

(a) To document **the** compliance **status** with Conditions E.3.1, the Permittee shall maintain records of the monthly natural gas usage in the rail car heaters.

(b) ~~All records shall be maintained in accordance with~~**.** Section C - General Record Keeping Requirements ~~of this permit~~ **contains the Permittee's obligations with regard to the records required by this condition.**

E.3.5 Reporting Requirements

A quarterly summary of the information to document **the** compliance **status** with condition E.3.1 shall be ~~submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within~~ **not later than** thirty (30) days after the end of the quarter being reported. **Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.** The report submitted by the Permittee does require **a** ~~the~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by **a** ~~the~~ responsible official.

E.4.5 Preventive Maintenance Plan

A Preventive Maintenance Plan, ~~in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for the railcar dumpers, hoppers screens, transfer points and associated baghouses. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

E.4.7 Testing Requirements

~~Within~~ **Not later than** 36 months after issuance of Part 70 Operating Permit No. T089-7171-00169 (issued on July 19, 2006) and in order to comply with conditions E.4.3 and E.4.4 the Permittee shall perform PM/ PM_{10} stack tests on Railcar Dumper Stacks 8A and 8B and one of each of the following:

(a) Reclaim Hopper RCH-1 baghouse Stack DC-6 or Reclaim Hopper/C2 stack F5;

(b) Car Dump Hopper 1/C1 stack F1, Car Dump Hopper 2/C2 stack F2 or Car Dump Hopper 3/C3 stack F3;

(c) Transfer Point C1/C2 Stack F4, Transfer Point C4/C5 stack F10 or Transfer Point C5/C6 stack F11;

(d) Screen Transfer/C2 stack F7, Screen Transfer/C3 gate Transfer stack F8 or Screen Transfer/C4 Gate Transfer stack F9; and

(e) Transfer Point C6/Bin 1, stack F12, Transfer Point C5/Bin 2, stack F13 or Transfer Point C6/Bin 3 stack F14

utilizing a testing method approved by the commissioner. **Testing shall be conducted** in accordance with **the provisions of 326 IAC 3-6 (Source Sampling Procedures).** Section C – Performance Testing **contains the Permittee's obligation with regard to the performance testing required by this condition**. PM_{10} includes filterable and condensable PM_{10}. These tests shall be repeated at least once every five years from the date of ~~this~~ **the most recent** valid compliance demonstration.

The second five year cycle of PM/ PM_{10} tests shall be performed on the Railcar Dumper Stacks 8A and 8B and one of each of the following not tested previously:

(a) Reclaim Hopper RCH-1 baghouse Stack DC-6 or Reclaim Hopper/C2 stack F5;

(b) Car Dump Hopper 1/C1 stack F1, Car Dump Hopper 2/C2 stack F2 or Car Dump Hopper 3/C3 stack F3;

(c) Transfer Point C1/C2 Stack F4, Transfer Point C4/C5 stack F10 or Transfer Point C5/C6 stack F11;

(d) Screen Transfer/C2 stack F7, Screen Transfer/C3 gate Transfer stack F8 or Screen Transfer/C4 Gate Transfer stack F9; and

(e) Transfer Point C6/Bin 1, stack F12, Transfer Point C5/Bin 2, stack F13 or Transfer Point C6/Bin 3 stack F14

utilizing a testing method approved by the commissioner. **Testing shall be conducted** in accordance with **the provisions of 326 IAC 3-6 (Source Sampling Procedures).** Section C – Performance Testing **contains the Permittee's obligation with regard to the performance testing required by this condition**. PM_{10} includes filterable and condensable PM_{10}. These tests shall be repeated at least once every five years from the date of ~~this~~ **the most recent** valid compliance demonstration.

The third five year cycle of PM/ PM_{10} tests shall be performed on the Railcar Dumper Stacks 8A and 8B, Reclaim Hopper RCH-1 baghouse Stack DC-6 or Reclaim Hopper/C2 stack F5 and one of each of the following not tested previously in test cycle one or two:

(a) Car Dump Hopper 1/C1 stack F1, Car Dump Hopper 2/C2 stack F2 or Car Dump Hopper 3/C3 stack F3;

(b) Transfer Point C1/C2 Stack F4, Transfer Point C4/C5 stack F10 or Transfer Point C5/C6 stack F11;

(c) Screen Transfer/C2 stack F7, Screen Transfer/C3 gate Transfer stack F8 or Screen Transfer/C4 Gate Transfer stack F9; and

(d) Transfer Point C6/Bin 1, stack F12, Transfer Point C5/Bin 2, stack F13 or Transfer Point C6/Bin 3 stack F14

utilizing a testing method approved by the commissioner. **Testing shall be conducted** in accordance with **the provisions of 326 IAC 3-6 (Source Sampling Procedures).** Section C – Performance Testing **contains the Permittee's obligation with regard to the performance testing required by this condition**. PM_{10} includes filterable and condensable PM_{10}. These tests shall be repeated at least once every five years from the date of ~~this~~ **the most recent** valid compliance demonstration.

E.4.10 Record Keeping Requirements

(a) To document **the** compliance **status** with Condition E.4.7, the Permittee shall maintain records of the stacks tested during each five year testing cycle.

(b) ~~All records shall be maintained in accordance with~~**.** Section C - General Record Keeping Requirements ~~of this permit~~ **contains the Permittee's obligations with regard to the records required by this condition.**

Modification No. 1:

Section A.3 - Emissions Units and Pollutant Control Equipment Summary has been modified to reflect the addition of new emission units and control devices.

Section A.3 has been revised as follows:

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

The integrated steel mill, U.S. Steel-Gary Works consists of the following:

* * *

Carbon Alloy Synthesis Plant (CASP) A

(a) Raw Material Receiving Handling and Silos A, identified as RMRHSA, approved for construction in 2010, consisting of the following:

(1) One (1) CDA1 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) baghouse (OR-A-01-DC1105), exhausting to stack OR-A-01-ST1105.

(2) One (1) CDA2 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) dust collector (OR-A-01-DC2105), exhausting to stack OR-A-01-ST2105.

(3) Five (5) dry coal storage silos, each with a storage capacity of 240 tons of dried coal, ducted to dedicated baghouses (OR-A-02-DC1070, OR-A-02-DC2070, OR-A-02-DC3070, OR-A-02-DC4070, and OR-A-02-DC5070, respectively), exhausting to stacks OR-A-02-ST1070, OR-A-02-ST2070, OR-A-02-ST3070, OR-A-02-ST4070, and OR-A-02-ST5070, respectively.

(4) Five (5) blend #1 weigh feeders, each with a rated capacity of 40 tons per hour, and one (1) drag conveyor, with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-A-03-DC1105), exhausting to stack OR-A-03-ST1105.

(5) Four (4) blend #1 feed hoppers, with a rated capacity of 30 tons per hour, and two (2) blend #1 hopper feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-A-04-DC1105), exhausting to stack OR-A-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSA facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDA1, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER A1 and FER A2 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-A-01-CY-1305) and one (1) dust collector (OR-A-01-DC1205), in series, exhausting to stack OR-A-01-ST1215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCA1, approved for construction in 2010, with a maximum capacity of 100 tons per hour, ducted to one (1) dust collector (OR-A-02-DC1105), exhausting to stack OR-A-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDA2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER A3 and FER A4 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-A-01-CY-2305) and one (1) dust collector (OR-A-01-DC2205), in series, exhausting to stack OR-A-01-ST2215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCA2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, ducted to one (1) dust collector (OR-A-02-DC2105), exhausting to stack OR-A-02-ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERA1, approved for construction in 2010, with a maximum capacity of seven (7) tons of

coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB A1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR1015), one (1) cyclone (OR-A-09-CY-1025), and one (1) baghouse (OR-A-09-DC1030), in series, exhausting to stack OR-A-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERA2, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB A2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR2015), one (1) cyclone (OR-A-09-CY-2025), and one (1) baghouse (OR-A-09-DC2030), in series, exhausting to stack OR-A-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERA3, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB A3, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR3015), one (1) cyclone (OR-A-09-CY-3025), and one (1) baghouse (OR-A-09-DC3030), in series, exhausting to stack OR-A-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERA4, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB A4, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR4015), one (1) cyclone (OR-A-09-CY-4025), and one (1) baghouse (OR-A-09-DC4030), in series, exhausting to stack OR-A-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM A1 - RCLM A4, approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FER A1 - FER A4, consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 ^{0}F - 800 ^{0}F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB A1 - FERAB A4, respectively.

(2) Four (4) coal tar surge tanks, one (1) per FER.

(k) One (1) Carborec Storage and Blending Area A, identified as CBSBA, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to a baghouse (OR-A-05-DC1205), exhausting to stack OR-A-05-ST1205.

(2) Six (6) weigh feeders, each with a rated capacity of 40 tons per hour, and blend #2 drag conveyors, each with a rated capacity of 75 tons per hour, ducted to a baghouse (OR-A-05-DC1405), exhausting to stack OR-A-05-ST1405.

(3) One (1) Carborec storage silo, with a storage capacity of 240 tons, ducted to a baghouse (OR-A-05-DC6070), exhausting to stack OR-A-05-ST6070.

(4) One (1) blend #2 surge bin, with a storage capacity of 440 tons, ducted to a baghouse (OR-A-06-DC1405), exhausting to stack OR-A-06-ST1405.

(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, each with a rated capacity of 30 tons per hour, billet belt conveyors and one (1) billet roller screener, each with a rated capacity of 80 tons per hour, and one (1) billet fines weigh feeder, with a rated capacity of 10 tons per hour, ducted to a baghouse (OR-A-06-DC1205), exhausting to stack OR-A-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

(l) One (1) billet transfer area, approved for construction in 2010, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-A-06-HP1125, with a maximum rated capacity of 10 tons per hour.

(2) Three (3) billet fines open belt conveyors, identified as OR-A-06-CB1130, OR-A-06-CB1140, and OR-A-06-CB1145, each with a maximum rated capacity of 10 tons per hour.

(3) One (1) billet belt conveyor, identified as OR-A-06-CB1110, with a maximum rated capacity of 60 tons per hour.

(4) One (1) billet hopper, identified as OR-A-06-HP1115, with a maximum storage capacity of 3 tons.

(5) Four (4) billet belt conveyors, identified as OR-A-06-CB1120, OR-A-06-CB2120, OR-A-06-CB1126, and OR-A-06-CB2126, each with a maximum rated capacity of 60 tons per hour.

(6) Two (2) billet vibratory feeders, identified as OR-A-06-VF1125 and OR-A-06-VF2125, each with a rated maximum capacity of 30 tons per hour.

(7) Two (2) trolley car loading stations, collectively identified as OR-A-06-LD1128, each with maximum capacity of 30 tons per hour.

(8) One (1) billet hopper, identified as OR-A-06-HP1135, and five (5) belt conveyors, identified as OR-A-06-CB1150, OR-A-06-CB1160, OR-A-06-CB1170, OR-A-06-CB1180, and OR-A-06-CB1190, each with a rated capacity of 30 tons per hour.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRA1, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB A1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-A-10-SR1010), one (1) cyclone (OR-A-10-CY-1115), and one (1) baghouse (OR-A-10-DC1020), in series, exhausting to stack OR-A-10-ST1025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRA2, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB A2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-A-10-SR2010), one (1) cyclone (OR-A-10-CY-2115), and one (1) baghouse (OR-A-10-DC2020), in series, exhausting to stack OR-A-10-ST2025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(o) One (1) Finish Product Handling and Loading process, approved for construction in 2010, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-A-08-CB1020, OR-A-08-CB1030, OR-A-08-CB2020, and OR-A-08-CB2030, each with a maximum rated capacity of 20 tons per hour.

(2) One (1) Cokonyx belt conveyor, identified as OR-A-08-CD1035, with a maximum rated capacity of 40 tons per hour.

(p) One (1) lime storage silo, identified as LSA, approved for construction in 2010, with a storage capacity of 50 tons of lime, equipped with one (1) dust collector (OR-A-12-DC1006), exhausting to stack OR-A-12-ST1006.

(q) Two (2) diesel-fired emergency generators, identified as EGA1 and EGA2, approved for construction in 2010, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(r) One (1) natural gas-fired emergency generator, identified as EGA3, approved for construction in 2010, with a maximum rated output of 450 kW. Under 40 CFR 60, Subpart IIII, this is considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

Carbon Alloy Synthesis Plant (CASP) Module B

(a) Raw Material Receiving Handling and Silos B, identified as RMRHSB, approved for construction in 2010, consisting of the following:

(1) One (1) CDB1 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons

per hour, ducted to one (1) baghouse (OR-B-01-DC1105), exhausting to stack OR-B-01-ST1105.

(2) One (1) CDB2 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) dust collector (OR-B-01-DC2105), exhausting to stack OR-B-01-ST2105.

(3) Five (5) dry coal storage silos, each with a storage capacity of 240 tons of dried coal, ducted to dedicated baghouses (OR-B-02-DC1070, OR-B-02-DC2070, OR-B-02-DC3070, OR-B-02-DC4070, and OR-B-02-DC5070, respectively), exhausting to stacks OR-B-02-ST1070, OR-B-02-ST2070, OR-B-02-ST3070, OR-B-02-ST4070, and OR-B-02-ST5070, respectively.

(4) Five (5) blend #1 weigh feeders, each with a rated capacity of 40 tons per hour, and one (1) drag conveyor, with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-B-03-DC1105), exhausting to stack OR-B-03-ST1105.

(5) Four (4) blend #1 feed hoppers, with a rated capacity of 30 tons per hour, and two (2) blend #1 hopper feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-B-04-DC1105), exhausting to stack OR-B-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSB facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDB1, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER B1 and FER B2 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-B-01-CY-1305) and one (1) dust collector (OR-B-01-DC1205), in series, exhausting to stack OR-B-01-ST1215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCB1, approved for construction in 2010, with a maximum capacity of 100 tons per hour, ducted to one (1) dust collector (OR-B-02-DC1105), exhausting to stack OR-B-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDB2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER B3 and FER B4 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-B-01-CY-2305) and one (1) dust collector (OR-B-01-DC2205), in series, exhausting to stack OR-B-01-ST2215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCB2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, ducted to one (1) dust collector (OR-B-02-DC2105), exhausting to stack OR-B-02-ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB1, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB B1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-B-09-SR1015), one (1) cyclone (ORB-09-CY-1025), and one (1) baghouse (OR-B-09-DC1030), in series, exhausting to stack OR-B-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB2, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB B2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-B-09-SR2015), one (1) cyclone (OR-B09-CY-2025), and one (1) baghouse (OR-B-09-DC2030), in series, exhausting to stack OR-B-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB3, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB B3, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-B-09-SR3015), one (1) cyclone (OR-B-09-CY-3025), and one (1) baghouse (OR-B-09-DC3030), in series, exhausting to stack OR-B-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB4, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB B4, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-B-09-SR4015), one (1) cyclone (OR-B-09-CY-4025), and one (1) baghouse (OR-B-09-DC4030), in series, exhausting to stack OR-B-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM B1 - RCLM B4, approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FER B1 - FER B4, consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 ^{0}F - 800 ^{0}F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB B1 - FERAB B4, respectively.

(2) Four (4) coal tar surge tanks, one (1) per FER.

(k) One (1) Carborec Storage and Blending Area B, identified as CBSBB, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to a baghouse (OR-B-05-DC1205), exhausting to stack OR-B-05-ST1205.

(2) Six (6) weigh feeders, each with a rated capacity of 40 tons per hour, and blend #2 drag conveyors, each with a rated capacity of 75 tons per hour, ducted to a baghouse (OR-B-05-DC1405), exhausting to stack OR-B-05-ST1405.

(3) One (1) Carborec storage silo, with a storage capacity of 240 tons, ducted to a baghouse (OR-B-05-DC6070), exhausting to stack OR-B-05-ST6070.

(4) One (1) blend #2 surge bin, with a storage capacity of 440 tons, ducted to a baghouse (OR-B-06-DC1405), exhausting to stack OR-B-06-ST1405.

(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, each with a rated capacity of 30 tons per hour, billet belt conveyors and one (1) billet roller screener, each with a rated capacity of 80 tons per hour, and one (1) billet fines weigh feeder, with a rated capacity of 10 tons per hour, ducted to a baghouse (OR-B-06-DC1205), exhausting to stack OR-B-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

(l) One (1) billet transfer area, approved for construction in 2010, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-B-06-HP1125, with a maximum rated capacity of 10 tons per hour.

(2) Three (3) billet fines open belt conveyors, identified as OR-B-06-CB1130, OR-B-06-CB1140, and OR-B-06-CB1145, each with a maximum rated capacity of 10 tons per hour.

(3) One (1) billet belt conveyor, identified as OR-B-06-CB1110, with a maximum rated capacity of 60 tons per hour.

(4) One (1) billet hopper, identified as OR-B-06-HP1115, with a maximum storage capacity of 3 tons.

(5) Four (4) billet belt conveyors, identified as OR-B-06-CB1120, OR-B-06-CB2120, OR-B-06-CB1126, and OR-B-06-CB2126, each with a maximum rated capacity of 60 tons per hour.

(6) Two (2) billet vibratory feeders, identified as OR-B-06-VF1125 and OR-B-06-VF2125, each with a rated maximum capacity of 30 tons per hour.

(7) Two (2) trolley car loading stations, collectively identified as OR-B-06-LD1128, each with maximum capacity of 30 tons per hour.

(8) One (1) billet hopper, identified as OR-B-06-HP1135, and five (5) belt conveyors, identified as OR-B-06-CB1150, OR-B-06-CB1160, OR-B-06-

CB1170, OR-B-06-CB1180, and OR-B-06-CB1190, each with a rated capacity of 30 tons per hour.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRB1, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB B1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-B-10-SR1010), one (1) cyclone (OR-B-10-CY-1115), and one (1) baghouse (OR-B-10-DC1020), in series, exhausting to stack OR-B-10-ST1025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRB2, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB B2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-B-10-SR2010), one (1) cyclone (OR-B-10-CY-2115), and one (1) baghouse (OR-B-10-DC2020), in series, exhausting to stack OR-B-10-ST2025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(o) One (1) Finish Product Handling and Loading process, approved for construction in 2010, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-B-08-CB1020, OR-B-08-CB1030, OR-B-08-CB2020, and OR-B-08-CB2030, each with a maximum rated capacity of 20 tons per hour.

(2) One (1) Cokonyx belt conveyor, identified as OR-B-08-CD1035, with a maximum rated capacity of 40 tons per hour.

(p) One (1) lime storage silo, identified as LSB, approved for construction in 2010, with a storage capacity of 50 tons of lime, equipped with one (1) dust collector (OR-B-12-DC1006), exhausting to stack OR-B-12-ST1006.

(q) Two (2) diesel-fired emergency generators, identified as EGB1 and EGB2, approved for construction in 2010, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(r) One (1) natural gas-fired emergency generator, identified as EGB3, approved for construction in 2010, with a maximum rated output of 450 kW. Under 40 CFR 60, Subpart IIII, this is considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

Carbon Alloy Synthesis Plant (CASP) Module C

(a) Raw Material Receiving Handling and Silos C, identified as RMRHSC, approved for construction in 2010, consisting of the following:

(1) One (1) CDC1 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) baghouse (OR-C-01-DC1105), exhausting to stack OR-C-01-ST1105.

(2) One (1) CDC2 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) dust collector (OR-C-01-DC2105), exhausting to stack OR-C-01-ST2105.

(3) Five (5) dry coal storage silos, each with a storage capacity of 240 tons of dried coal, ducted to dedicated baghouses (OR-C-02-DC1070, OR-C-02-DC2070, OR-C-02-DC3070, OR-C-02-DC4070, and OR-C-02-DC5070, respectively), exhausting to stacks OR-C-02-ST1070, OR-C-02-ST2070, OR-C-02-ST3070, OR-C-02-ST4070, and OR-C-02-ST5070, respectively.

(4) Five (5) blend #1 weigh feeders, each with a rated capacity of 40 tons per hour, and one (1) drag conveyor, with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-C-03-DC1105), exhausting to stack OR-C-03-ST1105.

(5) Four (4) blend #1 feed hoppers, with a rated capacity of 30 tons per hour, and two (2) blend #1 hopper feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-C-04-DC1105), exhausting to stack OR-C-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSC facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDC1, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER C1 and FER C2 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-C-01-CY-1305) and one (1) dust collector (OR-C-01-DC1205), in series, exhausting to stack OR-C-01-ST1215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCC1, approved for construction in 2010, with a maximum capacity of 100 tons per hour, ducted to one (1) dust collector (OR-C-02-DC1105), exhausting to stack OR-C-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDC2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER C3 and FER C4 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-C-01-CY-2305) and one (1) dust collector (OR-C-01-DC2205), in series, exhausting to stack OR-C-01-ST2215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCC2, approved for construction in 2010, with a maximum capacity of 50 tons

per hour, ducted to one (1) dust collector (OR-C-02-DC2105), exhausting to stack OR-C-02-ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC1, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB C1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-C-09-SR1015), one (1) cyclone (OR-C-09-CY-1025), and one (1) baghouse (OR-C-09-DC1030), in series, exhausting to stack OR-C-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC2, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB C2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-C-09-SR2015), one (1) cyclone (OR-C-09-CY-2025), and one (1) baghouse (OR-C-09-DC2030), in series, exhausting to stack OR-C-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC3, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB C3, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-C-09-SR3015), one (1) cyclone (OR-C -09-CY-3025), and one (1) baghouse (OR-C-09-DC3030), in series, exhausting to stack OR-C-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC4, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB C4, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-C-09-SR4015), one (1) cyclone (OR-C-09-CY-4025), and one (1) baghouse (OR-C-09-DC4030), in series, exhausting to stack OR-C-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM C1 - RCLM C4, approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FER C1 - FER C4, consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 ^{0}F - 800 ^{0}F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB C1 - FERAB C4, respectively.

(2) Four (4) coal tar surge tanks, one (1) per FER.

(k) One (1) Carborec Storage and Blending Area C, identified as CBSBC, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to a baghouse (OR-C-05-DC1205), exhausting to stack OR-C-05-ST1205.

(2) Six (6) weigh feeders, each with a rated capacity of 40 tons per hour, and blend #2 drag conveyors, each with a rated capacity of 75 tons per hour, ducted to a baghouse (OR-C-05-DC1405), exhausting to stack OR-C-05-ST1405.

(3) One (1) Carborec storage silo, with a storage capacity of 240 tons, ducted to a baghouse (OR-C-05-DC6070), exhausting to stack OR-C-05-ST6070.

(4) One (1) blend #2 surge bin, with a storage capacity of 440 tons, ducted to a baghouse (OR-C-06-DC1405), exhausting to stack OR-C-06-ST1405.

(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, each with a rated capacity of 30 tons per hour, billet belt conveyors and one (1) billet roller screener, each with a rated capacity of 80 tons per hour, and one (1) billet fines weigh feeder, with a rated capacity of 10 tons per hour, ducted to a baghouse (OR-C-06-DC1205), exhausting to stack OR-C-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

(l) One (1) billet transfer area, approved for construction in 2010, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-C-06-HP1125, with a maximum rated capacity of 10 tons per hour.

(2) Three (3) billet fines open belt conveyors, identified as OR-C-06-CB1130, OR-C-06-CB1140, and OR-C-06-CB1145, each with a maximum rated capacity of 10 tons per hour.

(3) One (1) billet belt conveyor, identified as OR-C-06-CB1110, with a maximum rated capacity of 60 tons per hour.

(4) One (1) billet hopper, identified as OR-C-06-HP1115, with a maximum storage capacity of 3 tons.

(5) Four (4) billet belt conveyors, identified as OR-C-06-CB1120, OR-C-06-CB2120, OR-C-06-CB1126, and OR-C-06-CB2126, each with a maximum rated capacity of 60 tons per hour.

(6) Two (2) billet vibratory feeders, identified as OR-C-06-VF1125 and OR-C-06-VF2125, each with a rated maximum capacity of 30 tons per hour.

(7) Two (2) trolley car loading stations, collectively identified as OR-C-06-LD1128, each with maximum capacity of 30 tons per hour.

(8) One (1) billet hopper, identified as OR-C-06-HP1135, and five (5) belt conveyors, identified as OR-C-06-CB1150, OR-C-06-CB1160, OR-C-06-CB1170, OR-C-06-CB1180, and OR-C-06-CB1190, each with a rated capacity of 30 tons per hour.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRC1, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB C1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-C-10-SR1010), one (1) cyclone (OR-C-10-CY-1115), and one (1) baghouse (OR-C-10-DC1020), in series, exhausting to stack OR-C-10-ST1025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRC2, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB C2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-C-10-SR2010), one (1) cyclone (OR-C-10-CY-2115), and one (1) baghouse (OR-C-10-DC2020), in series, exhausting to stack OR-C-10-ST2025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(o) One (1) Finish Product Handling and Loading process, approved for construction in 2010, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-C-08-CB1020, OR-C-08-CB1030, OR-C-08-CB2020, and OR-C-08-CB2030, each with a maximum rated capacity of 20 tons per hour.

(2) One (1) Cokonyx belt conveyor, identified as OR-C-08-CD1035, with a maximum rated capacity of 40 tons per hour.

(p) One (1) lime storage silo, identified as LSC, approved for construction in 2010, with a storage capacity of 50 tons of lime, equipped with one (1) dust collector (OR-C-12-DC1006), exhausting to stack OR-C-12-ST1006.

(q) Two (2) diesel-fired emergency generators, identified as EGC1 and EGC2, approved for construction in 2010, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(r) One (1) natural gas-fired emergency generator, identified as EGC3, approved for construction in 2010, with a maximum rated output of 450 kW. Under 40 CFR 60, Subpart IIII, this is considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

Carbon Alloy Synthesis Plant (CASP) Module D

(a) Raw Material Receiving Handling and Silos D, identified as RMRHSD, approved for construction in 2010, consisting of the following:

(1) One (1) CDD1 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) baghouse (OR-D-01-DC1105), exhausting to stack OR-D-01-ST1105.

(2) One (1) CDD2 wet coal feed hopper discharge, with a rated capacity of 50 tons per hour, one (1) vibratory feeder, with a rated capacity of 50 tons per hour, and associated drag conveyors, each with a rated capacity of 50 tons per hour, ducted to one (1) dust collector (OR-D-01-DC2105), exhausting to stack OR-D-01-ST2105.

(3) Five (5) dry coal storage silos, each with a storage capacity of 240 tons of dried coal, ducted to dedicated baghouses (OR-D-02-DC1070, OR-D-02-DC2070, OR-D-02-DC3070, OR-D-02-DC4070, and OR-D-02-DC5070, respectively), exhausting to stacks OR-D-02-ST1070, OR-D-02-ST2070, OR-D-02-ST3070, OR-D-02-ST4070, and OR-D-02-ST5070, respectively.

(4) Five (5) blend #1 weigh feeders, each with a rated capacity of 40 tons per hour, and one (1) drag conveyor, with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-D-03-DC1105), exhausting to stack OR-D-03-ST1105.

(5) Four (4) blend #1 feed hoppers, with a rated capacity of 30 tons per hour, and two (2) blend #1 hopper feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to one (1) baghouse (OR-D-04-DC1105), exhausting to stack OR-D-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSD facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDD1, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER D1 and FER D2 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-D-01-CY-1305) and one (1) dust collector (OR-D-01-DC1205), in series, exhausting to stack OR-D-01-ST1215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCD1, approved for construction in 2010, with a maximum capacity of 100 tons per hour, ducted to one (1) dust collector (OR-D-02-DC1105), exhausting to stack OR-D-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDD2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, utilizing heated air from the FER D3 and FER D4 air to air heat exchangers to dry the coal, ducted to one (1) cyclone (OR-D-01-CY-2305) and one (1) dust collector (OR-D-01-DC2205), in series, exhausting to stack OR-D-01-ST2215. Under 40 CFR

60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCD2, approved for construction in 2010, with a maximum capacity of 50 tons per hour, ducted to one (1) dust collector (OR-D-02-DC2105), exhausting to stack OR-D-02-ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD1, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB D1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-D-09-SR1015), one (1) cyclone (OR-D-09-CY-1025), and one (1) baghouse (OR-D-09-DC1030), in series, exhausting to stack OR-D-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD2, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB D2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-D-09-SR2015), one (1) cyclone (OR-D -09-CY-2025), and one (1) baghouse (OR-D-09-DC2030), in series, exhausting to stack OR-D-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD3, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB D3, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-D-09-SR3015), one (1) cyclone (OR-D-09-CY-3025), and one (1) baghouse (OR-D-09-DC3030), in series, exhausting to stack OR-D-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD4, approved for construction in 2010, with a maximum capacity of seven (7) tons of coal per hour, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of four (4) MMBtu/hr, and one (1) integral afterburner, identified as FERAB D4, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through a heat exchanger to one (1) spray scrubber (OR-D-09-SR4015), one (1) cyclone (OR-D-09-CY-4025), and one (1) baghouse (OR-D-09-DC4030), in series, exhausting to stack OR-D-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM D1- RCLM D4 approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FER D1 - FER D4 consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 ^{0}F - 800 ^{0}F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB D1 - FERAB D4 respectively.

(2) Four (4) coal tar surge tanks, one (1) per FER.

(k) One (1) Carborec Storage and Blending Area D, identified as CBSBD, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, each with a rated capacity of 60 tons per hour, ducted to a baghouse (OR-D-05-DC1205), exhausting to stack OR-D-05-ST1205.

(2) Six (6) weigh feeders, each with a rated capacity of 40 tons per hour, and blend #2 drag conveyors, each with a rated capacity of 75 tons per hour, ducted to a baghouse (OR-D-05-DC1405), exhausting to stack OR-D-05-ST1405.

(3) One (1) Carborec storage silo, with a storage capacity of 240 tons, ducted to a baghouse (OR-D-05-DC6070), exhausting to stack OR-D-05-ST6070.

(4) One (1) blend #2 surge bin, with a storage capacity of 440 tons, ducted to a baghouse (OR-D-06-DC1405), exhausting to stack OR-D-06-ST1405.

(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, each with a rated capacity of 30 tons per hour, billet belt conveyors and one (1) billet roller screener, each with a rated capacity of 80 tons per hour, and one (1) billet fines weigh feeder, with a rated capacity of 10 tons per hour, ducted to a baghouse (OR-D-06-DC1205), exhausting to stack OR-D-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

(l) One (1) billet transfer area, approved for construction in 2010, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-D-06-HP1125, with a maximum rated capacity of 10 tons per hour.

(2) Three (3) billet fines open belt conveyors, identified as OR-D-06-CB1130, OR-D-06-CB1140, and OR-D-06-CB1145, each with a maximum rated capacity of 10 tons per hour.

(3) One (1) billet belt conveyor, identified as OR-D-06-CB1110, with a maximum rated capacity of 60 tons per hour.

(4) One (1) billet hopper, identified as OR-D-06-HP1115, with a maximum storage capacity of 3 tons.

(5) Four (4) billet belt conveyors, identified as OR-D-06-CB1120, OR-D-06-CB2120, OR-D-06-CB1126, and OR-D-06-CB2126, each with a maximum rated capacity of 60 tons per hour.

(6) Two (2) billet vibratory feeders, identified as OR-D-06-VF1125 and OR-D-06-VF2125, each with a rated maximum capacity of 30 tons per hour.

(7) Two (2) trolley car loading stations, collectively identified as OR-D-06-LD1128, each with maximum capacity of 30 tons per hour.

(8) One (1) billet hopper, identified as OR-D-06-HP1135, and five (5) belt conveyors, identified as OR-D-06-CB1150, OR-D-06-CB1160, OR-D-06-CB1170, OR-D-06-CB1180, and OR-D-06-CB1190, each with a rated capacity of 30 tons per hour.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRD1, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB D1, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-D-10-SR1010), one (1) cyclone (OR-D-10-CY-1115), and one (1) baghouse (OR-D-10-DC1020), in series, exhausting to stack OR-D-10-ST1025. Under 40 CFR 60, Subpart Dc, this is considered an affected steam generating unit.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRD2, approved for construction in 2010, with a maximum production capacity of 20 tons per hour of Cokonyx, equipped with natural gas-fired low-NOx burners with a combined maximum heat input capacity of fifty (50) MMBtu/hr, with off gases ducted to one (1) afterburner, identified as PFRAB D2, equipped with natural gas-fired burners with a combined maximum heat input capacity of ten (10) MMBtu/hr, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-D-10-SR2010), one (1) cyclone (OR-D-10-CY-2115), and one (1) baghouse (OR-D-10-DC2020), in series, exhausting to stack OR-D-10-ST2025.

(o) One (1) Finish Product Handling and Loading process, approved for construction in 2010, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-D-08-CB1020, OR-D-08-CB1030, OR-D-08-CB2020, and OR-D-08-CB2030, each with a maximum rated capacity of 20 tons per hour.

(2) One (1) Cokonyx belt conveyor, identified as OR-D-08-CD1035, with a maximum rated capacity of 40 tons per hour.

(p) One (1) lime storage silo, identified as LSD, approved for construction in 2010, with a storage capacity of 50 tons of lime, equipped with one (1) dust collector (OR-D-12-DC1006), exhausting to stack OR-D-12-ST1006.

(q) Two (2) diesel-fired emergency generators, identified as EGD1 and EGD2, approved for construction in 2010, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(r) One (1) natural gas-fired emergency generator, identified as EGD3, approved for construction in 2010, with a maximum rated output of 450 kW. Under 40 CFR 60,

Subpart IIII, this is considered an emergency stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

CASP Coal Receiving and Handling

(a) Phase 1 CASP C and CASP D coal handling, approved for construction in 2010, consisting of the following:

(1) One (1) feed hopper and conveyor No.1 (PHS1-HC1), with a maximum rated capacity of 100 tons per hour, with emissions uncontrolled.

(2) Two (2) CASP C coal conveyors, identified as PHS1C-C1 and PHS1C-C2, each with a maximum rate of 100 tons per hour, with emissions uncontrolled.

(3) One (1) CASP C coal feed hopper No.2, identified as CASPC-FH2, with a maximum rate of 100 tons per hour, with hopper receiving emissions uncontrolled.

(4) Two (2) CASP D coal conveyors, identified as PHS1D-C1 and PHS1D-C2, each with a maximum rate of 100 tons per hour, with emissions uncontrolled.

(5) One (1) CASP D coal feed hopper No.2, identified as CASPD-FH2, with a maximum rate of 100 tons per hour, with hopper receiving emissions uncontrolled.

(b) Phase 2 CASP coal handling, approved for construction in 2010, consisting of the following:

(1) Two (2) CASP coal conveyors, identified as CASP-C1 and CASP-C2, each with a maximum rate of 100 tons per hour, with emissions uncontrolled.

(2) One (1) CASP rotary stacker CASP-RS1, with a maximum rate of 200 tons per hour, with emissions uncontrolled.

(3) Four (4) CASP coal conveyor feed hoppers No.1, identified as CASPA-FH1, CASPB-FH1, CASPC-FH1, and CASPD-FH1, each with a maximum rate of 100 tons per hour, with emissions uncontrolled.

(4) Two (2) CASP A coal conveyors, identified as CASPA-C1 and CASPA-C2, each with a maximum rated capacity of 100 tons per hour, with emissions uncontrolled.

(5) One (1) CASP A coal feed hopper No.2, identified as CASPA-FH2, with a maximum rate of 100 tons per hour, with hopper receiving emissions uncontrolled.

(6) Two (2) CASP B coal conveyors, identified as CASPB-C1 and CASPB-C2, each with a maximum rated capacity of 100 tons per hour, with emissions uncontrolled.

(7) One (1) CASP B coal feed hopper No.2, identified as CASPB-FH2, with a maximum rate of 100 tons per hour, with hopper receiving emissions uncontrolled.

(8) Two (2) CASP C coal conveyors, identified as CASPC-C1 and CASPC-C2, each with a maximum rated capacity of 100 tons per hour, with emissions uncontrolled.

(9) Two (2) CASP D coal conveyors, identified as CASPD-C1 and CASPD-C2, each with a maximum rated capacity of 100 tons per hour, with emissions uncontrolled.

Under 40 CFR 60, Subpart Y, the CASP Raw Material Receiving and Handling facilities are considered coal processing and conveying equipment, and coal storage systems.

(c) Storage Piles

(1) One (1) PHS1 intermediate coal storage pile No. 1, with a storage capacity of 0.25 acres.
(2) Four (4) PHS1 coal storage piles, with a combined storage capacity of 3.6 acres.
(3) One (1) PHS1 intermediate coal storage pile No. 2, with a storage capacity of 0.25 acres.
(4) Four (4) CASP coal storage piles, with a combined a storage capacity of 3.6 acres.

Under 40 CFR 60, Subpart Y, these storage piles are each considered open storage piles.

CASP Cokonyx Loadout

(a) Two (2) single deck vibratory screener feeders for CASP A, identified as CASPA-VF1 and CASPA-VF2, approved for construction in 2010, each with a maximum rated capacity of 20 tons per hour, with emissions uncontrolled.

(b) Two (2) single deck vibratory screener feeders for CASP B, identified as CASPB-VF1 and CASPB-VF2, approved for construction in 2010, each with a maximum rated capacity of 20 tons per hour, with emissions uncontrolled.

(c) Two (2) single deck vibratory screener feeders for CASP C, identified as CASPC-VF1 and CASPC-VF2, approved for construction in 2010, each with a maximum rated capacity of 20 tons per hour, with emissions uncontrolled.

(d) Two (2) single deck vibratory screener feeders for CASP D, identified as CASPD-VF1 and CASPD-VF2, approved for construction in 2010, each with a maximum rated capacity of 20 tons per hour, with emissions uncontrolled.

(e) Two (2) emergency product by-pass bunkers for CASP A, identified as CASPA-EB1 and CASPA-EB2, approved for construction in 2010, with emissions uncontrolled.

(f) Two (2) emergency product by-pass bunkers for CASP B, identified as CASPB-EB1 and CASPB-EB2, approved for construction in 2010, with emissions uncontrolled.

(g) Two (2) emergency product by-pass bunkers for CASP C, identified as CASPC-EB1 and CASPC-EB2, approved for construction in 2010, with emissions uncontrolled.

(h) Two (2) emergency product by-pass bunkers for CASP D, identified as CASPD-EB1 and CASPD-EB2, approved for construction in 2010, with emissions uncontrolled.

(i) Two (2) Cokonyx loadout conveyors for CASP A, identified as CKNXC-A1 and CKNXC-A2, approved for construction in 2010, each with a maximum capacity of 20 tons of Cokonyx per hour, with emissions uncontrolled.

(j) Two (2) Cokonyx loadout conveyors for CASP B, identified as CKNXC-B1 and CKNXC-B2, approved for construction in 2010, each with a maximum capacity of 20 tons of Cokonyx per hour, with emissions uncontrolled.

(k) Two (2) Cokonyx loadout conveyors for CASP C, identified as CKNXC-C1 and CKNXC-C2, approved for construction in 2010, each with a maximum capacity of 20 tons of Cokonyx per hour, with emissions uncontrolled.

(l) Two (2) Cokonyx loadout conveyors for CASP D, identified as CKNXC-D1 and CKNXC-D2, approved for construction in 2010, each with a maximum capacity of 20 tons of Cokonyx per hour, with emissions uncontrolled.

(m) One (1) C/D Cokonyx conveyor, identified as CKNXC-C/D, approved for construction in 2010, with a maximum capacity of 57 tons of Cokonyx per hour, with emissions uncontrolled.

(n) One (1) A/B Cokonyx conveyor, identified as CKNXC-A/B, approved for construction in 2010, with a maximum capacity of 57 tons of Cokonyx per hour, with emissions uncontrolled.

(o) Two (2) C/D Cokonyx surge bins, collectively identified as CKNXBin-C/D1, approved for construction in 2010, with a maximum capacity of 147 tons per bin, with emissions uncontrolled.

(p) Two (2) A/B Cokonyx surge bins, collectively identified as CKNXBin-A/B1, approved for construction in 2010, with a maximum storage capacity of 147 tons per silo, with emissions uncontrolled.

(q) Storage Piles

(1) CASP A/B Cokonyx Emergency Storage Pile, with a storage capacity of 0.02 acres.

(2) CASP C/D Cokonyx Emergency Storage Pile, with a storage capacity of 0.02 acres.

* * *

Modification No. 2:

To ensure the emissions increase from the CASP modification (Significant Source Modification No. 089-28848-00121 and Significant Permit Modification No. 089-29236-00121) is less than twenty-five (25) tons per year of PM, fifteen (15) tons per year of PM10, ten (10) tons per year of PM2.5, forty (40) tons per year of NOx, forty (40) tons per year of SO2, twenty-five (25) tons per year of VOC, and one hundred (100) tons per year of CO; and to render the requirements of 326 IAC 2-2 (PSD), 326 IAC 2-3 (Emission Offset), and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable to the CASP modification, new Conditions D.1.9 and D.2.9 have been added to the permit as follows:

D.1.9 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10/NOx/SO2/CO [326 IAC 2-2]
Emission Offset Minor Limit VOC [326 IAC 2-3]
Nonattainment New Source Review (NSR) Minor Limit PM2.5 [326 IAC 2-1.1-5]

Pursuant to 326 IAC 2-2 (PSD), 326 IAC 2-3 (Emission Offset), and 326 IAC 2-1.1-5 (Nonattainment New Source Review), and in order to render the requirements of 326 IAC 2-2 (PSD), 326 IAC 2-3 (Emission Offset), and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable to the Carbon Alloy Synthesis Plant (CASP) modifications (Significant Source Modification (SSM) No. 089-28848-00121 and Significant Permit Modification (SPM) No. 089-29236-00121), the Permittee shall decommission and permanently shutdown the No. 3 Coke Battery Precarbonization facility, consisting of three (3) lines: Line A (CH3A0017), Line B (CH3B0018), and Line C (CH3C0019); prior to startup of the first of the four (4) Carbon Alloy Synthesis Plants (CASP).

Compliance with this requirement, in conjunction with other limits taken as part of the CASP modifications (SSM 089-22848-00121 and SPM 089-29236-00121), will ensure the following:

(a) The PM, PM10, NOx, SO2, and CO emissions increase from the CASP modifications shall be less than twenty-five (25), fifteen (15), forty (40), forty (40), and one hundred (100) tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable to these modifications.

(b) The VOC and NOx emissions increase from the CASP modifications shall be less than twenty-five (25) and forty (40) tons per year, respectively. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) are rendered not applicable to these modifications.

(c) The PM2.5 and SO2 emissions increase from the CASP modifications shall be less than ten (10) and forty (40) tons per year, respectively. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) are rendered not applicable to these modifications.

D.2.9 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10/NOx/SO2/CO [326 IAC 2-2]
Emission Offset Minor Limit VOC [326 IAC 2-3]
Nonattainment New Source Review (NSR) Minor Limit PM2.5 [326 IAC 2-1.1-5]

Pursuant to 326 IAC 2-2 (PSD), 326 IAC 2-3 (Emission Offset), and 326 IAC 2-1.1-5 (Nonattainment New Source Review), and in order to render the requirements of 326 IAC 2-2 (PSD), 326 IAC 2-3 (Emission Offset), and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable to the Carbon Alloy Synthesis Plant (CASP) modifications (Significant Source Modification (SSM) No. 089-28848-00121 and Significant Permit Modification (SPM) No. 089-29236-00121), the following shall apply:

(a) Prior to startup of the first of the four (4) Carbon Alloy Synthesis Plants (CASP), the Permittee shall decommission and permanently shutdown No. 3 Coke Battery.

(b) Within one hundred eighty (180) days after startup of the third Carbon Alloy Synthesis Plant (CASP), the Permittee shall decommission and permanently shutdown either No. 5 Coke Battery or No. 7 Coke Battery.

(c) Within one hundred eighty (180) days after startup of the fourth Carbon Alloy Synthesis Plant (CASP), the Permittee shall decommission and permanently

shutdown either No. 5 Coke Battery or No. 7 Coke Battery, whichever is still operational, and Nos. 5 and 6 Quench Towers.

Compliance with these requirements, in conjunction with other limits taken as part of the CASP modifications (SSM 089-22848-00121 and SPM 089-29236-00121), will ensure the following:

(d) The PM, PM10, NOx, SO2, and CO emissions increase from the CASP modifications shall be less than twenty-five (25), fifteen (15), forty (40), forty (40), and one hundred (100) tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable to these modifications.

(e) The VOC and NOx emissions increase from the CASP modifications shall be less than twenty-five (25) and forty (40) tons per year, respectively. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) are rendered not applicable to these modifications.

(f) The PM2.5 and SO2 emissions increase from the CASP modifications shall be less than ten (10) and forty (40) tons per year, respectively. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) are rendered not applicable to these modifications.

Modification No. 3:

Section A.4 - Insignificant Activities has been modified to reflect the addition of new insignificant activities.

Section A.4 has been revised as follows:

A.4 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

* * *

(d) Specifically regulated insignificant activities (Carbon Alloy Synthesis Plants):

CASP Module A

(1) One (1) lubricating oil storage tank, identified as STO3 A, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 A, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT A1 and PFRCT A2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPA, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 60, Subpart IIII, this is considered a fire pump stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

(5) One (1) coal tar storage tank, identified as STO1 A, approved for construction in 2010, with a storage capacity of 10,000 gallons.

CASP Module B

(1) One (1) lubricating oil storage tank, identified as STO3 B, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 B, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT B1 and PFRCT B2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPB, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 60, Subpart IIII, this is considered a fire pump stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

(5) Two (2) coal tar storage tanks, identified as STO1 B and STO2 B, approved for construction in 2010, each with a storage capacity of 10,000 gallons.

CASP Module C

(1) One (1) lubricating oil storage tank, identified as STO3 C, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 C, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT C and PFRCT C2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPC, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 60, Subpart IIII, this is considered a fire pump stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

(5) Two (2) coal tar storage tanks, identified as STO1 C and STO2 C, approved for construction in 2010, each with a storage capacity of 10,000 gallons.

CASP Module D

(1) One (1) lubricating oil storage tank, identified as STO3 D, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 D, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT D1 and PFRCT D2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPD, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40

CFR 60, Subpart IIII, this is considered a fire pump stationary CI ICE. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

(5) One (1) coal tar storage tank, identified as STO1 D, approved for construction in 2010, with a storage capacity of 10,000 gallons.

Modification No. 4:

New Section D.18- Facility Operation Conditions has been added to incorporate the applicable Part 70 requirements for the proposed Feed Enhancement Reactors, including the coal tar reformers, and the Particle Fusion Reactors.

Section D.18 has been added as follows:

Section D.18 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Note: Complete Descriptions are shown in Section A.2.

<u>CASP A</u>

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln No. 1, identified as FERA1, and one (1) integral afterburner, identified as FERAB A1, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR1015), one (1) cyclone (OR-A-09-CY-1025), and one (1) baghouse (OR-A-09-DC1030), in series, exhausting to stack OR-A-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERA2, and one (1) integral afterburner, identified as FERAB A2, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR2015), one (1) cyclone (OR-A-09-CY-2025), and one (1) baghouse (OR-A-09-DC2030), in series, exhausting to stack OR-A-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERA3, and one (1) integral afterburner, identified as FERAB A3, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR3015), one (1) cyclone (OR-A-09-CY-3025), and one (1) baghouse (OR-A-09-DC3030), in series, exhausting to stack OR-A-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERA4, and one (1) integral afterburner, identified as FERAB A4, exhausting through a heat exchanger to one (1) spray scrubber (OR-A-09-SR4015), one (1) cyclone (OR-A-09-CY-4025), and one (1) baghouse (OR-A-09-DC4030), in series, exhausting to stack OR-A-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM A1 - RCLM A4, approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FERA1 - FERA4, consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 ^{0}F - 800 ^{0}F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB A1 - FERAB A4, respectively.
(2) Four (4) coal tar surge tanks, one (1) per FER.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRA1, and one (1) afterburner, identified as PFRAB A1, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-A-10-SR1010), one (1) cyclone (OR-A-10-CY-1115), and one (1) baghouse (OR-A-10-DC1020), in series, exhausting to stack OR-A-10-ST1025.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRA2, and one (1) afterburner, identified as PFRAB A2, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-A-10-SR2010), one (1) cyclone (OR-A-10-CY-2115), and one (1) baghouse (OR-A-10-DC2020), in series, exhausting to stack OR-A-10-ST2025.

CASP B

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB1, and one (1) integral afterburner, identified as FERAB B1, exhausting through a heat exchanger to one (1) spray scrubber (OR-B-09-SR1015), one (1) cyclone (ORB-09-CY-1025), and one (1) baghouse (OR-B-09-DC1030), in series, exhausting to stack OR-B-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB2, and one (1) integral afterburner, identified as FERAB B2, exhausting through a heat exchanger to one (1) spray scrubber (OR-B-09-SR2015), one (1) cyclone (OR-B09-CY-2025), and one (1) baghouse (OR-B-09-DC2030), in series, exhausting to stack OR-B-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB3, and one (1) integral afterburner, identified as FERAB B3, exhausting through a heat exchanger to one (1) spray scrubber (OR-B-09-SR3015), one (1) cyclone (OR-B-09-CY-3025), and one (1) baghouse (OR-B-09-DC3030), in series, exhausting to stack OR-B-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERB4, and one (1) integral afterburner, identified as FERAB B4, exhausting through a heat exchanger to one (1) spray scrubber (OR-B-09-SR4015), one (1) cyclone (OR-B-09-CY-4025), and one (1) baghouse (OR-B-09-DC4030), in series, exhausting to stack OR-B-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM B1 - RCLM B4, approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FERB1 - FERB4, consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 ^{0}F - 800 ^{0}F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB B1 - FERAB B4, respectively.
(2) Four (4) coal tar surge tanks, one (1) per FER.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRB1, and one (1) afterburner, identified as PFRAB B1, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-B-10-SR1010), one (1) cyclone (OR-B-10-CY-1115), and one (1) baghouse (OR-B-10-DC1020), in series, exhausting to stack OR-B-10-ST1025.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRB2, and one (1) afterburner, identified as PFRAB B2, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-B10-SR2010), one (1) cyclone (OR-B-10-CY-2115), and one (1) baghouse (OR-B-10-DC2020), in series, exhausting to stack OR-B-10-ST2025.

CASP C

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC1, and one (1) integral afterburner, identified as FERAB C1, exhausting through a heat exchanger to one (1) spray scrubber (OR-C-09-SR1015), one (1) cyclone (OR-C-09-CY-1025), and one (1) baghouse (OR-C-09-DC1030), in series, exhausting to stack OR-C-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC2, and one (1) integral afterburner, identified as FERAB C2, exhausting through a heat exchanger to one (1) spray scrubber (OR-C-09-SR2015), one (1) cyclone (OR-C-09-CY-2025), and one (1) baghouse (OR-C-09-DC2030), in series, exhausting to stack OR-C-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC3, and one (1) integral afterburner, identified as FERAB C3, exhausting through a heat exchanger to one (1) spray scrubber (OR-C-09-SR3015), one (1) cyclone (OR-C -09-CY-3025), and one (1) baghouse (OR-C-09-DC3030), in series, exhausting to stack OR-C-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERC4, and one (1) integral afterburner, identified as FERAB C4, exhausting through a heat exchanger to one (1) spray scrubber (OR-C-09-SR4015), one (1) cyclone (OR-C-09-CY-4025), and one (1) baghouse (OR-C-09-DC4030), in series, exhausting to stack OR-C-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM C1 - RCLM C4, approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FERC1 - FERC4, consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 ^{0}F - 800 ^{0}F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB C1 - FERAB C4, respectively.
(2) Four (4) coal tar surge tanks, one (1) per FER.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRC1, and one (1) afterburner, identified as PFRAB C1, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-C-10-SR1010), one (1) cyclone (OR-C-10-CY-1115), and one (1) baghouse (OR-C-10-DC1020), in series, exhausting to stack OR-C-10-ST1025.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRC2, and one (1) afterburner, identified as PFRAB C2, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-C-10-SR2010), one (1) cyclone (OR-C-10-CY-2115), and one (1) baghouse (OR-C-10-DC2020), in series, exhausting to stack OR-C-10-ST2025.

<u>CASP D</u>

(f) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD1, and one (1) integral afterburner, exhausting through a heat exchanger to one (1) spray scrubber (OR-D-09-SR1015), one (1) cyclone (OR-D-09-CY-1025), and one (1) baghouse (OR-D-09-DC1030), in series, exhausting to stack OR-D-09-ST1045.

(g) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD2, and one (1) integral afterburner, identified as FERAB D2, exhausting through a heat exchanger to one (1) spray scrubber (OR-D-09-SR2015), one (1) cyclone (OR-D -09-CY-2025), and one (1) baghouse (OR-D-09-DC2030), in series, exhausting to stack OR-D-09-ST2045.

(h) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD3, and one (1) integral afterburner, identified as FERAB D3, exhausting through a heat exchanger to one (1) spray scrubber (OR-D-09-SR3015), one (1) cyclone (OR-D-09-CY-3025), and one (1) baghouse (OR-D-09-DC3030), in series, exhausting to stack OR-D-09-ST3045.

(i) One (1) Feed Enhancement Reactor (FER) rotary kiln, identified as FERD4, and one (1) integral afterburner, identified as FERAB D4, exhausting through a heat exchanger to one (1) spray scrubber (OR-D-09-SR4015), one (1) cyclone (OR-D-09-CY-4025), and one (1) baghouse (OR-D-09-DC4030), in series, exhausting to stack OR-D-09-ST4045.

(j) Four (4) coal tar reclaimer systems, identified as RCLM D1 - RCLM D4, approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FERD1 - FERD4, consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 ^{0}F - 800 ^{0}F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB D1 - FERAB D4, respectively.
(2) Four (4) coal tar surge tanks, one (1) per FER.

(m) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRD1, and one (1) afterburner, identified as PFRAB D1, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-D-10-SR1010), one (1) cyclone (OR-D-10-CY-1115), and one (1) baghouse (OR-D-10-DC1020), in series, exhausting to stack OR-D-10-ST1025.

(n) One (1) Particle Fusion Reactor (PFR) tunnel kiln, identified as PFRD2, and one (1) afterburner, identified as PFRAB D2, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-D-10-SR2010), one (1) cyclone (OR-D-10-CY-2115), and one (1) baghouse (OR-D-10-DC2020), in series, exhausting to stack OR-D-10-ST2025.

(j) Four (4) coal tar reclaimer systems, identified as RCLM A1 - RCLM A4, approved for construction in 2010, each with a maximum capacity of 2,000 pounds of coal tar recovered per hour, one system dedicated to each of FER A1 - FER A4, consisting of the following:

(1) Four (4) reformers, one (1) per FER, operating at a temperature range of 500 ^{0}F - 800 ^{0}F, for the recovery and distillation of coal tar, with non-recovered vapors exhausting to FERAB A1 - FERAB A4, respectively.
(2) Four (4) coal tar surge tanks, one (1) per FER.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.18.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10/NOx/SO2/CO [326 IAC 2-2]
Emission Offset Minor Limit VOC/NOx [326 IAC 2-3]
Nonattainment New Source Review (NSR) Minor Limit PM2.5/SO2 [326 IAC 2-1.1-5]

Pursuant to 326 IAC 2-2 (PSD), 326 IAC 2-3 (Emission Offset), and 326 IAC 2-1.1-5 (Nonattainment New Source Review), and in order to render the requirements of 326 IAC 2-2 (PSD), 326 IAC 2-3 (Emission Offset), and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable to the Carbon Alloy Synthesis Plant (CASP) modifications (Significant Source Modification (SSM) No. 089-28848-00121 and Significant Permit Modification (SPM) No. 089-29236-00121), the Permittee shall comply with the following:

(a) PM, PM_{10}, $PM_{2.5}$, NOx, SO2, CO, and VOC emissions from the following units shall not exceed the emission limits listed in the table below:

Unit ID	Emission Limits (lbs/hr)				
	PM/ PM10/ PM2.5 (each)	NOx	SO2	CO	VOC
CASP A - Feed Enhancement Reactors (FER)					
FERA1	0.40	0.80	0.10	1.10E-07	0.25
FERA2	0.40	0.80	0.10	1.10E-07	0.25
FERA3	0.40	0.80	0.10	1.10E-07	0.25
FERA4	0.40	0.80	0.10	1.10E-07	0.25
CASP A - Particle Fusion Reactors (PFR)					
PFRA1	3.10	3.20	7.60	9.20E-06	0.25
PFRA2	3.10	3.20	7.60	9.20E-06	0.25
CASP B - Feed Enhancement Reactors (FER)					
FERB1	0.40	0.80	0.10	1.10E-07	0.25
FERB2	0.40	0.80	0.10	1.10E-07	0.25
FERB3	0.40	0.80	0.10	1.10E-07	0.25
FERB4	0.40	0.80	0.10	1.10E-07	0.25
CASP B - Particle Fusion Reactors (PFR)					
PFRB1	3.10	3.20	7.60	9.20E-06	0.25
PFRB2	3.10	3.20	7.60	9.20E-06	0.25
CASP C - Feed Enhancement Reactors (FER)					
FERC1	0.40	0.80	0.10	1.10E-07	0.25
FERC2	0.40	0.80	0.10	1.10E-07	0.25
FERC3	0.40	0.80	0.10	1.10E-07	0.25
FERC4	0.40	0.80	0.10	1.10E-07	0.25
CASP C - Particle Fusion Reactors (PFR)					
PFRC1	3.10	3.20	7.60	9.20E-06	0.25
PFRC2	3.10	3.20	7.60	9.20E-06	0.25
CASP D - Feed Enhancement Reactors (FER)					
FERD1	0.40	0.80	0.10	1.10E-07	0.25
FERD2	0.40	0.80	0.10	1.10E-07	0.25
FERD3	0.40	0.80	0.10	1.10E-07	0.25
FERD4	0.40	0.80	0.10	1.10E-07	0.25
CASP D - Particle Fusion Reactors (PFR)					
PFRD1	3.10	3.20	7.60	9.20E-06	0.25
PFRD2	3.10	3.20	7.60	9.20E-06	0.25

(b) The control devices for each of the above Feed Enhancement Reactors (FER) shall achieve one hundred percent (100%) capture of the emissions generated from the associated FER process.

(c) The control devices for each of the above Particle Fusion Reactors (PFR) shall achieve one hundred percent (100%) capture of the emissions generated from the associated PFR process.

Compliance with these limits, in conjunction with other limits taken as part of the CASP modification (SSM 089-22848-00121 and SPM 089-29236-00121), will ensure the following:

(d) The PM, PM10, NOx, SO2, and CO emissions increase from the CASP modifications shall be less than twenty-five (25), fifteen (15), forty (40), forty (40), and one hundred (100) tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable to these modifications.

(e) The VOC and NOx emissions increase from the CASP modifications shall be less than twenty-five (25) and forty (40) tons per year, respectively. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) are rendered not applicable to these modifications.

(f) The PM2.5 and SO2 emissions increase from the CASP modifications shall be less than ten (10) and forty (40) tons per year, respectively. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) are rendered not applicable to these modifications.

D.18.2 Particulate Emission Limitation [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), the Permittee shall not allow or permit discharge to the atmosphere any gases which contain particulate matter in excess of 0.03 grain per dry standard cubic foot (dscf) from each of the facilities listed in this section.

D.18.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for each of the facilities and control devices listed in this section. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.18.4 Particulate Control

(a) In order for all units to comply with Conditions D.18.1 and D.18.2, each baghouse and cyclone listed in this section shall be in operation and controlling particulate at all times when its associated facility/emissions unit is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.18.5 Spray Scrubber Operation

In order for all units to comply with Condition D.18.1, each spray scrubber listed in this section shall be in operation at all times when its associated facility/emissions unit is in operation.

In order to comply with Condition D.18.1, each spray scrubber associated with a FER shall be in operation and capturing emissions from its associated FER at all time the associated FER is in operation.

D.18.6 Feed Enhancement Reactor (FER) Afterburner and Particle Fusion Reactor (PFR) Afterburner Operation

In order to comply with Condition D.18.1, the Feed Enhancement Reactor afterburners FERAB A1, FERAB A2, FERAB B1, FERAB B2, FERAB C1, FERAB C2, FERAB D1, and FERAB D2 shall be in operation and combusting the process emissions at all times when the associated Feed Enhancement Reactor is in operation.

In order to comply with Condition D.18.1, the Particle Fusion Reactor afterburners PFRAB A1, PFRAB A2, PFRAB B1, PFRAB B2, PFRAB C1, PFRAB C2, PFRAB D1, and PFRAB D2 shall be in operation and control VOC emissions at all times when the associated Particle Fusion Reactor is in operation.

In order to comply with Condition D.18.1, all PFR fans exhausting to the afterburners shall be in operation and capturing emissions from its associated PFR at all time the associated PFR is in operation.

D.18.7 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) Not later than 180 days after the startup of CASP A, the Permittee shall perform PM, PM10, PM2.5, NOx, SO2, CO, and VOC testing of one (1) of the four (4) Feed Enhancement Reactors (FERA1, FERA2, FERA3, FERA4) and one (1) of the two (2) Particle Fusion Reactor (PFRA1, PFRA2) utilizing methods approved by the commissioner at least once every 2.5 years from the date of the most recent compliance demonstration.

(1) Until such time that all Feed Enhancement Reactors (FERA1, FERA2, FERA3, FERA4) have been tested once, subsequent testing shall be conducted for a FER that has not yet demonstrated compliance. After such time that all Feed Enhancement Reactors (FERA1, FERA2, FERA3, FERA4) have been tested, testing shall be conducted for the FER with the longest lapse in time since the most recent compliance demonstration.

(2) Subsequent testing of the Particle Fusion Reactors (PFRA1, PFRA2) shall be conducted for the Particle Fusion Reactor not tested in the most recent compliance demonstration.

(b) Not later than 180 days after the startup of CASP B, the Permittee shall perform PM, PM10, PM2.5, NOx, SO2, CO, and VOC testing of one (1) of the four (4) Feed Enhancement Reactors (FERB1, FERB2, FERB3, FERB4) and one (1) of the two (2) Particle Fusion Reactor (PFRB1, PFRB2) utilizing methods approved by the commissioner at least once every 2.5 years from the date of the most recent compliance demonstration.

(1) Until such time that all Feed Enhancement Reactors (FERB1, FERB2, FERB3, FERB4) have been tested once, subsequent testing shall be conducted for a FER that has not yet demonstrated compliance. After such time that all Feed Enhancement Reactors (FERB1, FERB2, FERB3, FERB4) have been tested, testing shall be conducted for the FER with the longest lapse in time since the most recent compliance demonstration.

(2) Subsequent testing of the Particle Fusion Reactors (PFRB1, PFRB2) shall be conducted for the Particle Fusion Reactor not tested in the most recent compliance demonstration.

(c) Not later than 180 days after the startup of CASP C, the Permittee shall perform PM, PM10, PM2.5, NOx, SO2, CO, and VOC testing of one (1) of the four (4) Feed Enhancement Reactors (FERC1, FERC2, FERC3, FERC4) and one (1) of the two (2) Particle Fusion Reactor (PFRC1, PFRC2) utilizing methods approved by the commissioner at least once every 2.5 years from the date of the most recent compliance demonstration.

(1) Until such time that all Feed Enhancement Reactors (FERC1, FERC2, FERC3, FERC4) have been tested once, subsequent testing shall be conducted for a FER that has not yet demonstrated compliance. After such time that all Feed Enhancement Reactors (FERC1, FERC2, FERC3, FERC4) have been tested, testing shall be conducted for the FER with the longest lapse in time since the most recent compliance demonstration.

(2) Subsequent testing of the Particle Fusion Reactors (PFRC1, PFRC2) shall be conducted for the Particle Fusion Reactor not tested in the most recent compliance demonstration.

(d) Not later than 180 days after the startup of CASP D, the Permittee shall perform PM, PM10, PM2.5, NOx, SO2, CO, and VOC testing of one (1) of the four (4) Feed Enhancement Reactors (FERD1, FERD2, FERD3, FERD4) and one (1) of the two (2) Particle Fusion Reactor (PFRD1, PFRD2) utilizing methods approved by the commissioner at least once every 2.5 years from the date of the most recent compliance demonstration.

(1) Until such time that all Feed Enhancement Reactors (FERD1, FERD2, FERD3, FERD4) have been tested once, subsequent testing shall be conducted for a FER that has not yet demonstrated compliance. After such time that all Feed Enhancement Reactors (FERD1, FERD2, FERD3, FERD4) have been tested, testing shall be conducted for the FER with the longest lapse in time since the most recent compliance demonstration.

(2) Subsequent testing of the Particle Fusion Reactors (PFRD1, PFRD2) shall be conducted for the Particle Fusion Reactor not tested in the most recent compliance demonstration.

(e) In lieu of performing the initial compliance tests for PM10 and PM2.5 in accordance with the schedules set forth in Condition D.18.7 (a) through (e), should the new or revised condensable PM test method(s) referenced in U.S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5) signed on May 8, 2008, fail to be published at the time of the required testing, the Permittee may elect to test not later than 180 days after publication of the new or revised condensable PM test method(s) referenced in U.S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5) signed on May 8, 2008. Subsequent testing for PM10 and PM2.5 shall not be effected by this condition (D.18.7(e)) and shall be performed in accordance with Condition D.18.7 (a) through (e).

(f) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.18.8 Feed Enhancement Reactor Afterburner and Particle Fusion Reactor Afterburner Temperature Monitoring

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the Feed Enhancement Reactor afterburners (FERAB A1, FERAB A2, FERAB B1, FERAB B2, FERAB C1, FERAB C2, FERAB D1, and FERAB D2) and the Particle Fusion Reactor afterburners (PFRAB A1, PFRAB A2, PFRAB B1, PFRAB B2, PFRAB C1, PFRAB C2, PFRAB D1, and PFRAB D2) for measuring operating temperature. For the purpose of this condition, continuous means no less often than once per fifteen (15) minutes. The output of this system shall be recorded as a 3-hour average. From the date of startup until the stack test results are available, the Permittee shall operate each afterburner at or above the 3-hour average temperature of 1,850°F.

(b) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with limits in Condition D.18.1.

(c) On and after the date the stack test results are available, the Permittee shall operate each afterburner at or above the 3-hour average temperature as observed during the compliant stack test.

D.18.9 Coal Tar Reclaimer Temperature Monitoring

A continuous monitoring system shall be calibrated, maintained, and operated on each of the coal tar reclaimer systems listed in this section for measuring outlet exhaust temperature of each reformer. For the purposes of this condition, continuous monitoring shall mean no less often than once per minute. The output of this system shall be recorded as a 15-min average. The Permittee shall operate each coal tar reformer at or above the 15-minute average temperature of 300 °F.

D.18.10 Scrubber Monitoring

(a) The Permittee shall monitor the pH of the scrubbing liquid, exhaust air stream pressure drop, and pump discharge pressure of all spray scrubbers listed in this section at least once per day when the spray tower absorber is in operation.

(b) When for any one reading, the pH of the scrubbing liquid is less than 5.0, or a minimum established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pH reading that is less than 5.0 is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(c) When for any one reading, the exhaust air stream pressure drop is outside the normal range of 1.0 and 6.0 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An exhaust air stream pressure drop that is outside the range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(d) When for any one reading, the pump discharge pressure is outside a range of 2 and 3 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions or

Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pump discharge pressure that is outside a range of 2 to 3 inches of water, or a range established during the latest stack test, is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(e) The instruments used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.18.11 Visible Emissions Notations

(a) Visible emission notations of all the baghouse stack exhausts listed in this section shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, at least eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal missions are observed, the Permittee shall take reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal reading is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.18.12 Parametric Monitoring Notations

The Permittee shall record the pressure drop across each baghouse and cyclone listed in this section, at least once per day when the associated facility/emissions unit is in operation. When for any one reading, the pressure drop across a baghouse is outside the normal range of 2.0 and 12.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps, shall be considered a deviation from this permit.

The instruments used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.18.13 Broken or Failed Bag Detection

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later that the completion of the processing of the material in the line or emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

D.18.14 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.18.15 Record Keeping Requirements

(a) To document the compliance status with Condition D.18.8, the Permittee shall maintain the continuous temperature records (on a 3-hour average basis) for the Feed Enhancement Reactor afterburners and Particle Fusion Reactor afterburners and the 3-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

(b) To document the compliance status with Condition D.18.9, the Permittee shall maintain the continuous temperature records (on a 15-minute average basis) for the coal tar reformers.

(c) To document the compliance status with Condition D.18.10, the Permittee shall maintain daily records of the scrubber operating parameters required by that condition. The Permittee shall include in its daily record when a reading is not taken and the reason for the lack of a reading (e.g. the process did not operate that day).

(d) To document the compliance status with Condition D.18.11, the Permittee shall maintain daily records of the visible emission notations of the stack exhaust of each baghouse listed in this section. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (i.e. the process did not operate that day).

(e) To document the compliance status with Condition D.18.12, the Permittee shall maintain daily records of the pressure drop across each baghouse and cyclone listed in this section. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (i.e. the process did not operate that day).

(f) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

Modification No. 5:

New Section D.19- Facility Operation Conditions has been added to incorporate the applicable Part 70 requirements for the proposed coal, Carborec, Cokonyx, and lime handling and storage facilities equipped with baghouse.

Section D.19 has been added as follows:

Section D.19 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Note: Complete Descriptions are shown in Section A.2.

CASP A

(a) Raw Material Receiving Handling and Silos A, identified as RMRHSA, consisting of the following:

(1) One (1) CDA1 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) baghouse (OR-A-01-DC1105), exhausting to stack OR-A-01-ST1105.
(2) One (1) CDA2 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) dust collector (OR-A-01-DC2105), exhausting to stack OR-A-01-ST2105.
(3) Five (5) dry coal storage silos, ducted to dedicated baghouses (OR-A-02-DC1070, OR-A-02-DC2070, OR-A-02-DC3070, OR-A-02-DC4070, and OR-A-02-DC5070, respectively), exhausting to stacks OR-A-02-ST1070, OR-A-02-ST2070, OR-A-02-ST3070, OR-A-02-ST4070, and OR-A-02-ST5070, respectively.
(4) Five (5) blend #1 weigh feeders and one (1) drag conveyor, ducted to one (1) baghouse (OR-A-03-DC1105), exhausting to stack OR-A-03-ST1105.
(5) Four (4) blend #1 feed hoppers and two (2) blend #1 hopper feed drag conveyors, ducted to one (1) baghouse (OR-A-04-DC1105), exhausting to stack OR-A-04-ST1105.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDA1, ducted to one (1) cyclone (OR-A-01-CY-1305) and one (1) dust collector (OR-A-01-DC1205), in series, exhausting to stack OR-A-01-ST1205.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCA1, ducted to one (1) dust collector (OR-A-02-DC1105), exhausting to stack OR-A-02-ST1105.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDA2, ducted to one (1) cyclone (OR-A-01-CY-2305) and one (1) dust collector (OR-A-01-DC2205), in series, exhausting to stack OR-A-01-ST2205.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCA2, ducted to one (1) dust collector (OR-A-02-DC2105), exhausting to stack OR-A-02-ST2105.

(k) One (1) Carborec Storage and Blending Area A, identified as CBSBA, consisting of the following:

(1) Carborec crusher feed drag conveyors, ducted to a baghouse (OR-A-05-DC1205), exhausting to stack OR-A-05-ST1205.
(2) Six (6) weigh feeders and blend #2 drag conveyors, ducted to a baghouse (OR-A-05-DC1405), exhausting to stack OR-A-05-ST1405.
(3) One (1) Carborec storage silo, ducted to a baghouse (OR-A-05-DC6070), exhausting to stack OR-A-05-ST6070.
(4) One (1) blend #2 surge bin, ducted to a baghouse (OR-A-06-DC1405), exhausting to stack OR-A-06-ST1405.
(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, ducted to a baghouse (OR-A-06-DC1205), exhausting to stack OR-A-06-ST1205.

(p) One (1) lime storage silo, identified as LSA, equipped with one (1) dust collector (OR-A-12-DC1006), exhausting to stack OR-A-12-ST1006.

CASP B

(a) Raw Material Receiving Handling and Silos B, identified as RMRHSB, approved for construction in 2010, consisting of the following:

(1) One (1) CDB1 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) baghouse (OR-B-01-DC1105), exhausting to stack OR-B-01-ST1105.
(2) One (1) CDB2 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) dust collector (OR-B-01-DC2105), exhausting to stack OR-B-01-ST2105.
(3) Five (5) dry coal storage silos, ducted to dedicated baghouses (OR-B-02-DC1070, OR-B-02-DC2070, OR-B-02-DC3070, OR-B-02-DC4070, and OR-B-02-DC5070, respectively), exhausting to stacks OR-B-02-ST1070, OR-B-02-ST2070, OR-B-02-ST3070, OR-B-02-ST4070, and OR-B-02-ST5070, respectively.
(4) Five (5) blend #1 weigh feeders and one (1) drag conveyor, ducted to one (1) baghouse (OR-B-03-DC1105), exhausting to stack OR-B-03-ST1105.
(5) Four (4) blend #1 feed hoppers and two (2) blend #1 hopper feed drag conveyors, ducted to one (1) baghouse (OR-B-04-DC1105), exhausting to stack OR-B-04-ST1105.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDB1, ducted to one (1) cyclone (OR-B-01-CY-1305) and one (1) dust collector (OR-B-01-DC1205), in series, exhausting to stack OR-B-01-ST1205.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCB1, ducted to one (1) dust collector (OR-B-02-DC1105), exhausting to stack OR-B-02-ST1105.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDB2, ducted to one (1) cyclone (OR-B-01-CY-2305) and one (1) dust collector (OR-B-01-DC2205), in series, exhausting to stack OR-B-01-ST2205.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCB2, ducted to one (1) dust collector (OR-B-02-DC2105), exhausting to stack OR-B-02-ST2105.

(k) One (1) Carborec Storage and Blending Area B, identified as CBSBB, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, ducted to a baghouse (OR-B-05-DC1205), exhausting to stack OR-B-05-DC1205.
(2) Six (6) weigh feeders and blend #2 drag conveyors, ducted to a baghouse (OR-B-05-DC1405), exhausting to stack OR-B-05-DC1405.
(3) One (1) Carborec storage silo, ducted to a baghouse (OR-B-05-DC6070), exhausting to stack OR-B-05-ST6070.
(4) One (1) blend #2 surge bin, ducted to a baghouse (OR-B-06-DC1405), exhausting to stack OR-B-06-ST1405.
(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, ducted to a baghouse (OR-B-06-DC1205), exhausting to stack OR-B-06-ST1205.

(p) One (1) lime storage silo, identified as LSB, equipped with one (1) dust collector (OR-B-12-DC1006), exhausting to stack OR-B-12-ST1006.

CASP C

(a) Raw Material Receiving Handling and Silos C, identified as RMRHSC, approved for construction in 2010, consisting of the following:

(1) One (1) CDC1 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) baghouse (OR-C-01-DC1105), exhausting to stack OR-C-01-ST1105.
(2) One (1) CDC2 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) dust collector (OR-C-01-DC2105), exhausting to stack OR-C-01-ST2105.
(3) Five (5) dry coal storage silos, ducted to dedicated baghouses (OR-C-02-DC1070, OR-C-02-DC2070, OR-C-02-DC3070, OR-C-02-DC4070, and OR-C-02-DC5070, respectively), exhausting to stacks OR-C-02-ST1070, OR-C-02-ST2070, OR-C-02-ST3070, OR-C-02-ST4070, and OR-C-02-ST5070, respectively.
(4) Five (5) blend #1 weigh feeders and one (1) drag conveyor, ducted to one (1) baghouse (OR-C-03-DC1105), exhausting to stack OR-C-03-ST1105.
(5) Four (4) blend #1 feed hoppers and two (2) blend #1 hopper feed drag conveyors, ducted to one (1) baghouse (OR-C-04-DC1105), exhausting to stack OR-C-04-ST1105.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDC1, ducted to one (1) cyclone (OR-C-01-CY-1305) and one (1) dust collector (OR-C-01-DC1205), in series, exhausting to stack OR-C-01-ST1205.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCC1, ducted to one (1) dust collector (OR-C-02-DC1105), exhausting to stack OR-C-02-ST1105.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDC2, ducted to one (1) cyclone (OR-C-01-CY-2305) and one (1) dust collector (OR-C-01-DC2205), in series, exhausting to stack OR-C-01-ST2205.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCC2, ducted to one (1) dust collector (OR-C-02-DC2105), exhausting to stack OR-C-02-ST2105.

(k) One (1) Carborec Storage and Blending Area C, identified as CBSBC, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, ducted to a baghouse (OR-C-05-DC1205), exhausting to stack OR-C-05-ST1205.
(2) Six (6) weigh feeders and blend #2 drag conveyors, ducted to a baghouse (OR-C-05-DC1405), exhausting to stack OR-C-05-ST1405.
(3) One (1) Carborec storage silo, ducted to a baghouse (OR-C-05-DC6070), exhausting to stack OR-C-05-ST6070.
(4) One (1) blend #2 surge bin, ducted to a baghouse (OR-C-06-DC1405), exhausting to stack OR-C-06-ST1405.
(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, ducted to a baghouse (OR-C-06-DC1205), exhausting to stack OR-C-06-ST1205.

(p) One (1) lime storage silo, identified as LSC, equipped with one (1) dust collector (OR-C-12-DC1006), exhausting to stack OR-C-12-ST1006.

CASP D

(a) Raw Material Receiving Handling and Silos D, identified as RMRHSD, approved for construction in 2010, consisting of the following:

(1) One (1) CDD1 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) baghouse (OR-D-01-DC1105), exhausting to stack OR-D-01-ST1105.
(2) One (1) CDD2 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) dust collector (OR-D-01-DC2105), exhausting to stack OR-D-01-ST2105.
(3) Five (5) dry coal storage silos, ducted to dedicated baghouses (OR-D-02-DC1070, OR-D-02-DC2070, OR-D-02-DC3070, OR-D-02-DC4070, and OR-D-02-DC5070, respectively), exhausting to stacks OR-D-02-ST1070, OR-D-02-ST2070, OR-D-02-ST3070, OR-D-02-ST4070, and OR-D-02-ST5070, respectively.
(4) Five (5) blend #1 weigh feeders and one (1) drag conveyor, ducted to one (1) baghouse (OR-D-03-DC1105), exhausting to stack OR-D-03-ST1105.
(5) Four (4) blend #1 feed hoppers and two (2) blend #1 hopper feed drag conveyors, ducted to one (1) baghouse (OR-D-04-DC1105), exhausting to stack OR-D-04-ST1105.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDD1, ducted to one (1) cyclone (OR-D-01-CY-1305) and one (1) dust collector (OR-D-01-DC1205), in series, exhausting to stack OR-D-01-ST1205.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCD1, ducted to one (1) dust collector (OR-D-02-DC1105), exhausting to stack OR-D-02-ST1105.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDD2, ducted to one (1) cyclone (OR-D-01-CY-2305) and one (1) dust collector (OR-D-01-DC2205), in series, exhausting to stack OR-D-01-ST2205.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCD2, ducted to one (1) dust collector (OR-D-02-DC2105), exhausting to stack OR-D-02-ST2105.

(k) One (1) Carborec Storage and Blending Area D, identified as CBSBD, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, ducted to a baghouse (OR-D-05-DC1205), exhausting to stack OR-D-05-ST1205.
(2) Six (6) weigh feeders and blend #2 drag conveyors, ducted to a baghouse (OR-D-05-DC1405), exhausting to stack OR-D-05-ST1405.
(3) One (1) Carborec storage silo, ducted to a baghouse (OR-D-05-DC6070), exhausting to stack OR-D-05-ST6070.
(4) One (1) blend #2 surge bin, ducted to a baghouse (OR-D-06-DC1405), exhausting to stack OR-D-06-ST1405.
(5) Three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, ducted to a baghouse (OR-D-06-DC1205), exhausting to stack OR-DA-06-ST1205.

(p) One (1) lime storage silo, identified as LSD, equipped with one (1) dust collector (OR-D-12-DC1006), exhausting to stack OR-D-12-ST1006.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.19.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10/NOx/SO2/CO [326 IAC 2-2]
Nonattainment New Source Review (NSR) Minor Limit PM2.5 [326 IAC 2-1.1-5]

Pursuant to 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment New Source Review), and in order to render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable to the Carbon Alloy Synthesis Plant (CASP) modifications (Significant Source Modification (SSM) No. 089-28848-00121 and Significant Permit Modification (SPM) No. 089-29236-00121), the Permittee shall comply with the following:

(a) PM, PM_{10}, and $PM_{2.5}$ emissions from the following units shall not exceed the emission limits listed in the table below:

Facilities	Stack ID	PM/ PM10/ PM2.5 (lb/hr each)
coal dryer and associated dried coal conveyors (CDA1)	OR-A-01-ST1215	1.29
coal crusher and associated crushed coal conveyors (CCA1)	OR-A-02-ST1105	0.11
coal dryer and associated dried coal conveyors (CDA2)	OR-A-01-ST2215	1.29
coal crusher and associated crushed coal conveyors (CCA2)	OR-A-02-ST2105	0.11
lime storage silo (LSA)	OR-A-12-ST1006	0.04
coal dryer and associated dried coal conveyors (CDB1)	OR-B-01-ST1215	1.29
coal crusher and associated crushed coal conveyors (CCB1)	OR-B-02-ST1105	0.11
coal dryer and associated dried coal conveyors (CDB2)	OR-B-01-ST2215	1.29
coal crusher and associated crushed coal conveyors (CCB2)	OR-B-02-ST2105	0.11
lime storage silo (LSB)	OR-B-12-ST1006	0.04
coal dryer and associated dried coal conveyors (CDC1)	OR-C-01-ST1215	1.29
coal crusher and associated crushed coal conveyors (CCC1)	OR-C-02-ST1105	0.11
coal dryer and associated dried coal conveyors (CDC2)	OR-C-01-ST2215	1.29
coal crusher and associated crushed coal conveyors (CCC2)	OR-C-02-ST2105	0.11
lime storage silo (LSC)	OR-C-12-ST1006	0.04
coal dryer and associated dried coal conveyors (CDD1)	OR-D-01-ST1215	1.29
coal crusher and associated crushed coal conveyors (CCD1)	OR-D-02-ST1105	0.11
coal dryer and associated dried coal conveyors (CDD2)	OR-D-01-ST2215	1.29
coal crusher and associated crushed coal conveyors (CCD2)	OR-D-02-ST2105	0.11
lime storage silo (LSD)	OR-D-12-ST1006	0.04
CASP A - RMRHSA		
CDA1 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-A-01-ST1105	0.05
CDA2 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-A-01-ST2105	0.11
dry coal storage silo	OR-A-02-ST1070	0.03
dry coal storage silo	OR-A-02-ST2070	0.03
dry coal storage silo	OR-A-02-ST3070	0.03
dry coal storage silo	OR-A-02-ST4070	0.03
dry coal storage silo	OR-A-02-ST5070	0.03
blend #1 weigh feeders and drag conveyor	OR-A-03-ST1105	0.11

Facilities	Stack ID	PM/ PM10/ PM2.5 (lb/hr each)
blend #1 feed hoppers and blend #1 hopper feed drag conveyors	OR-A-04-ST1105	0.03
CASP A - CBSBA		
Carborec crusher feed drag conveyors	OR-A-05-ST1205	0.11
weigh feeders and blend #2 drag conveyors	OR-A-05-ST1405	0.41
Carborec storage silo	OR-A-05-ST6070	0.04
blend #2 surge bin	OR-A-06-ST1405	0.04
blend #2 weigh feeders, blend #2 drag conveyors, blend #2 crushers, hi-intensive mixers, pug mills, densifers, billet belt conveyors, billet roller screener, and billet fines weigh feeder	OR-A-06-ST1205	0.11
CASP B - RMRHSB		
CDB1 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-B-01-ST1105	0.05
CDB2 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-B-01-ST2105	0.11
dry coal storage silo	OR-B-02-ST1070	0.03
dry coal storage silo	OR-B-02-ST2070	0.03
dry coal storage silo	OR-B-02-ST3070	0.03
dry coal storage silo	OR-B-02-ST4070	0.03
dry coal storage silo	OR-B-02-ST5070	0.03
blend #1 weigh feeders and drag conveyor	OR-B-03-ST1105	0.11
blend #1 feed hoppers and blend #1 hopper feed drag conveyors	OR-B-04-ST1105	0.03
CASP B - CBSBB		
Carborec crusher feed drag conveyors	OR-B-05-ST1205	0.11
weigh feeders and blend #2 drag conveyors	OR-B-05-ST1405	0.41
Carborec storage silo	OR-B-05-ST6070	0.04
blend #2 surge bin	OR-B-06-ST1405	0.04
blend #2 weigh feeders, blend #2 drag conveyors, blend #2 crushers, hi-intensive mixers, pug mills, densifers, billet belt conveyors, billet roller screener, and billet fines weigh feeder	OR-B-06-ST1205	0.11
CASP C - RMRHSC		
CDC1 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-C-01-ST1105	0.05
CDC2 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-C-01-ST2105	0.11
dry coal storage silo	OR-C-02-ST1070	0.03
dry coal storage silo	OR-C-02-ST2070	0.03
dry coal storage silo	OR-C-02-ST3070	0.03
dry coal storage silo	OR-C-02-ST4070	0.03
dry coal storage silo	OR-C-02-ST5070	0.03

Facilities	Stack ID	PM/ PM10/ PM2.5 (lb/hr each)
blend #1 weigh feeders and drag conveyor	OR-C-03-ST1105	0.11
blend #1 feed hoppers and blend #1 hopper feed drag conveyors	OR-C-04-ST1105	0.03
CASP C - CBSBC		
Carborec crusher feed drag conveyors	OR-C-05-ST1205	0.11
weigh feeders and blend #2 drag conveyors	OR-C-05-ST1405	0.41
Carborec storage silo	OR-C-05-ST6070	0.04
blend #2 surge bin	OR-C-06-ST1405	0.04
blend #2 weigh feeders, blend #2 drag conveyors, blend #2 crushers, hi-intensive mixers, pug mills, densifers, billet belt conveyors, billet roller screener, and billet fines weigh feeder	OR-C-06-ST1205	0.11
CASP D - RMRHSD		
CDD1 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-D-01-ST1105	0.05
CDD2 wet coal feed hopper discharge, vibratory feeder, and associated drag conveyors	OR-D-01-ST2105	0.11
dry coal storage silo	OR-D-02-ST1070	0.03
dry coal storage silo	OR-D-02-ST2070	0.03
dry coal storage silo	OR-D-02-ST3070	0.03
dry coal storage silo	OR-D-02-ST4070	0.03
dry coal storage silo	OR-D-02-ST5070	0.03
blend #1 weigh feeders and drag conveyor	OR-D-03-ST1105	0.11
blend #1 feed hoppers and blend #1 hopper feed drag conveyors	OR-D-04-ST1105	0.03
CASP D - CBSBD		
Carborec crusher feed drag conveyors	OR-D-05-ST1205	0.11
weigh feeders and blend #2 drag conveyors	OR-D-05-ST1405	0.41
Carborec storage silo	OR-D-05-ST6070	0.04
blend #2 surge bin	OR-D-06-ST1405	0.04
blend #2 weigh feeders, blend #2 drag conveyors, blend #2 crushers, hi-intensive mixers, pug mills, densifers, billet belt conveyors, billet roller screener, and billet fines weigh feeder	OR-D-06-ST1205	0.11

Compliance with these limits, in conjunction with other limits taken as part of the CASP modification (SSM 089-22848-00121 and SPM 089-29236-00121), will ensure the following:

(b) The PM and PM10 emissions increase from the CASP modifications shall be less than twenty-five (25) and fifteen (15) tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable to these modifications.

(c) The PM2.5 emissions increase from the CASP modifications shall be less than ten (10) tons per year. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) are rendered not applicable to these modifications.

D.19.2 Particulate Emission Limitation [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), the Permittee shall not allow or permit discharge to the atmosphere any gases which contain particulate matter in excess of 0.03 grain per dry standard cubic foot (dscf) from each of the facilities listed in this section.

D.19.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for each of the facilities and control devices listed in this section. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.19.4 Particulate Control

(a) In order for all units to comply with Conditions D.19.1 and D.19.2, each baghouse listed in this section shall be in operation and controlling particulate at all times when its associated facility/emissions unit is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.19.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) Not later than 180 days after the startup of CASP A, the Permittee shall perform PM, PM10, and PM2.5 testing of either the coal crusher and associated crushed coal conveyors, identified as CCA1, or the coal crusher and associated crushed coal conveyors, identified as CCA2, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Subsequent testing shall be conducted for the coal crusher and associated conveyors (CCA1 or CCA2) not tested in the most recent compliance demonstration.

(b) Not later than 180 days after the startup of CASP A, the Permittee shall perform PM, PM10, and PM2.5 testing of either the coal dryer and associated dried coal conveyors, identified as CDA1, or the coal dryer and associated dried coal conveyors, identified as CDA2, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Subsequent testing shall be conducted for the coal dryer and associated conveyors (CDA1 or CDA2) not tested in the most recent compliance demonstration.

(c) Not later than 180 days after the startup of CASP A, the Permittee shall perform PM, PM10, and PM2.5 testing of one (1) of the five (5) dry coal bins, identified under

RMRHSA, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Until such time that all five (5) dry coal bins have been tested once, subsequent testing shall be conducted for a dry coal bin that has not yet demonstrated compliance. After such time that all five (5) dry coal bins have been tested, testing shall be conducted for the dry coal bin with the longest lapse in time since the most recent compliance demonstration.

(d) Not later than 180 days after the startup of CASP A, the Permittee shall perform PM, PM10, and PM2.5 testing of the three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, identified under CBSBA, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

(e) Not later than 180 days after the startup of CASP B, the Permittee shall perform PM testing of either the coal crusher and associated crushed coal conveyors, identified as CCB1, or the coal crusher and associated crushed coal conveyors, identified as CCA2, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Subsequent testing shall be conducted for the coal crusher and associated conveyors (CCB1 or CCB2) not tested in the most recent compliance demonstration.

(f) Not later than 180 days after the startup of CASP B, the Permittee shall perform PM, PM10, and PM2.5 testing of either the coal dryer and associated dried coal conveyors, identified as CDB1, or the coal dryer and associated dried coal conveyors, identified as CDB2, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Subsequent testing shall be conducted for the coal dryer and associated conveyors (CDB1 or CDB2) not tested in the most recent compliance demonstration.

(g) Not later than 180 days after the startup of CASP B, the Permittee shall perform PM, PM10, and PM2.5 testing of one (1) of the five (5) dry coal bins, identified under RMRHSB, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Until such time that all five (5) dry coal bins have been tested once, subsequent testing shall be conducted for a dry coal bin that has not yet demonstrated compliance. After such time that all five (5) dry coal bins have been tested, testing shall be conducted for the dry coal bin with the longest lapse in time since the most recent compliance demonstration.

(h) Not later than 180 days after the startup of CASP B, the Permittee shall perform PM, PM10, and PM2.5 testing of the three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, identified under CBSBB, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

(i) Not later than 180 days after the startup of CASP C, the Permittee shall perform PM, PM10, and PM2.5 testing of either the coal crusher and associated crushed coal conveyors, identified as CCC1, or the coal crusher and associated crushed coal conveyors, identified as CCC2, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Subsequent testing shall be conducted for the coal crusher and associated conveyors (CCC1 or CCC2) not tested in the most recent compliance demonstration.

(j) Not later than 180 days after the startup of CASP C, the Permittee shall perform PM, PM10, and PM2.5 testing of either the coal dryer and associated dried coal conveyors, identified as CDC1, or the coal dryer and associated dried coal conveyors, identified as CDC2, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Subsequent testing shall be conducted for the coal dryer and associated conveyors (CDC1 or CDC2) not tested in the most recent compliance demonstration.

(k) Not later than 180 days after the startup of CASP C, the Permittee shall perform PM, PM10, and PM2.5 testing of one (1) of the five (5) dry coal bins, identified under RMRHSC, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Until such time that all five (5) dry coal bins have been tested once, subsequent testing shall be conducted for a dry coal bin that has not yet demonstrated compliance. After such time that all five (5) dry coal bins have been tested, testing shall be conducted for the dry coal bin with the longest lapse in time since the most recent compliance demonstration.

(l) Not later than 180 days after the startup of CASP C, the Permittee shall perform PM, PM10, and PM2.5 testing of the three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, identified under CBSBC, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

(m) Not later than 180 days after the startup of CASP D, the Permittee shall perform PM, PM10, and PM2.5 testing of either the coal crusher and associated crushed coal conveyors, identified as CCD1, or the coal crusher and associated crushed coal conveyors, identified as CCD2, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Subsequent testing shall be conducted for the coal crusher and associated conveyors (CCD1 or CCD2) not tested in the most recent compliance demonstration.

(n) Not later than 180 days after the startup of CASP D, the Permittee shall perform PM, PM10, and PM2.5 testing of either the coal dryer and associated dried coal conveyors, identified as CDD1, or the coal dryer and associated dried coal

conveyors, identified as CDD2, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Subsequent testing shall be conducted for the coal dryer and associated conveyors (CDD1 or CDD2) not tested in the most recent compliance demonstration.

(o) Not later than 180 days after the startup of CASP D, the Permittee shall perform PM, PM10, and PM2.5 testing of one (1) of the five (5) dry coal bins, identified under RMRHSD, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

Until such time that all five (5) dry coal bins have been tested once, subsequent testing shall be conducted for a dry coal bin that has not yet demonstrated compliance. After such time that all five (5) dry coal bins have been tested, testing shall be conducted for the dry coal bin with the longest lapse in time since the most recent compliance demonstration.

(p) Not later than 180 days after the startup of CASP D, the Permittee shall perform PM, PM10, and PM2.5 testing of the three (3) blend #2 weigh feeders, three (3) blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, and three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, identified under CBSBD, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent compliance demonstration.

(q) In lieu of performing the initial compliance tests for PM10 and PM2.5 in accordance with the schedules set forth in Condition D.19.5 (a) through (p), should the new or revised condensable PM test method(s) referenced in U.S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5) signed on May 8, 2008, fail to be published at the time of the required testing , the Permittee may elect to test not later than 180 days after publication of the new or revised condensable PM test method(s) referenced in U.S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5) signed on May 8, 2008. Subsequent testing for PM10 and PM2.5 shall not be effected by this condition (D.19.5(q)) and shall be performed in accordance with Condition D.19.5 (a) through (p).

(r) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.19.6 Visible Emissions Notations

(a) Visible emission notations of all the baghouse stack exhausts listed in this section shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, at least eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal missions are observed, the Permittee shall take reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal reading is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.19.7 Parametric Monitoring Notations

The Permittee shall record the pressure drop across each baghouse listed in this section, at least once per day when the associated facility/emissions unit is in operation. When for any one reading, the pressure drop across a baghouse is outside the normal range of 1.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps, shall be considered a deviation from this permit.

The instruments used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.19.8 Broken or Failed Bag Detection

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later that the completion of the processing of the material in the line or emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.19.9 Record Keeping Requirements

(a) To document the compliance status with Condition D.19.6, the Permittee shall maintain daily records of the visible emission notations of the stack exhaust of each baghouse listed in this section. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (i.e. the process did not operate that day).

(b) To document the compliance status with Condition D.19.7, the Permittee shall maintain daily records of the pressure drop across each baghouse listed in this section. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (i.e. the process did not operate that day).

(c) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

Modification No. 6:

New Section D.20 - Facility Operation Conditions has been added to incorporate the applicable Part 70 requirements for the proposed Carborec billet, Cokonyx, and coal handling and storage facilities not equipped with baghouses

Section D.20 has been added as follows:

Section D.20 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Note: Complete Descriptions are shown in Section A.2.

CASP A

(l) One (1) billet transfer area, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-A-06-HP1125.
(2) Three (3) billet fines open belt conveyors, identified as OR-A-06-CB1130, OR-A-06-CB1140, and OR-A-06- CB 1145.
(3) One (1) billet belt conveyor, identified as OR-A-06-CB1110.
(4) One (1) billet hopper, identified as OR-A-06-HP1115.
(5) Four (4) billet belt conveyors, identified as OR-A-06-CB1120, OR-A-06-CB2120, OR-A-06-CB1126, and OR-A-06-CB2126.
(6) Two (2) billet vibratory feeders, identified as OR-A-06-VF1125 and OR-A-06-VF2125.
(7) Two (2) trolley car loading stations, collectively identified as OR-A-06-LD1128.
(8) One (1) billet hopper, identified as OR-A-06-HP1135, and five (5) belt conveyors, identified as OR-A-06-CB1150, OR-A-06-CB1160, OR-A-06-CB1170, OR-A-06-CB1180, and OR-A-06-CB1190.

(o) One (1) Finish Product Handling and Loading process, approved for construction in 2010, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-A-08-CB1020, OR-A-08-CB1030, OR-A-08-CB2020, and OR-A-08-CB2030.
(2) One (1) Cokonyx belt conveyor, identified as OR-A-08-CD1035.

CASP B

(l) One (1) billet transfer area, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-B-06-HP1125.
(2) Three (3) billet fines open belt conveyors, identified as OR-B-06- CB 1130, OR-B-06-CB 1140, and OR-B-06- CB 1145.
(3) One (1) billet belt conveyor, identified as OR-B-06-CB1110.
(4) One (1) billet hopper, identified as OR-B-06-HP1115.
(5) Four (4) billet belt conveyors, identified as OR-B-06-CB1120, OR-B-06-CB2120, OR-B-06-CB1126, and OR-B-06-CB2126.
(6) Two (2) billet vibratory feeders, identified as OR-B-06-VF1125 and OR-B-06-VF2125.
(7) Two (2) trolley car loading stations, collectively identified as OR-B-06-LD1128.
(8) One (1) billet hopper, identified as OR-B-06-HP1135, and five (5) belt conveyors, identified as OR-B-06-CB1150, OR-B-06-CB1160, OR-B-06-CB1170, OR-B-06-CB1180, and OR-B-06-CB1190.

(o) One (1) Finish Product Handling and Loading process, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-B-08-CB1020, OR-B-08-CB1030, OR-B-08-CB2020, and OR-B-08-CB2030.
(2) One (1) Cokonyx belt conveyor, identified as OR-B-08-CD1035.

CASP C

(l) One (1) billet transfer area, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-C-06-HP1125.
(2) Three (3) billet fines open belt conveyors, identified as OR-C-06- CB 1130, OR-C-06-CB 1140, and OR-C-06- CB 1145.
(3) One (1) billet belt conveyor, identified as OR-C-06-CB1110.
(4) One (1) billet hopper, identified as OR-C-06-HP1115.
(5) Four (4) billet belt conveyors, identified as OR-C-06-CB1120, OR-C-06-CB2120, OR-C-06-CB1126, and OR-C-06-CB2126.
(6) Two (2) billet vibratory feeders, identified as OR-C-06-VF1125 and OR-C-06-VF2125.
(7) Two (2) trolley car loading stations, collectively identified as OR-C-06-LD1128.
(8) One (1) billet hopper, identified as OR-C-06-HP1135, and five (5) belt conveyors, identified as OR-C-06-CB1150, OR-C-06-CB1160, OR-C-06-CB1170, OR-C-06-CB1180, and OR-C-06-CB1190.

(o) One (1) Finish Product Handling and Loading process, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-C-08-CB1020, OR-C-08-CB1030, OR-C-08-CB2020, and OR-C-08-CB2030.
(2) One (1) Cokonyx belt conveyor, identified as OR-C-08-CD1035.

CASP D

(l) One (1) billet transfer area, with emissions uncontrolled, consisting of the following:

(1) One (1) billet fines hopper, identified as OR-D-06-HP1125.

(2) Three (3) billet fines open belt conveyors, identified as OR-D-06- CB 1130, OR-D-06-CB 1140, and OR-D-06- CB 1145.
(3) One (1) billet belt conveyor, identified as OR-D-06-CB1110.
(4) One (1) billet hopper, identified as OR-D-06-HP1115.
(5) Four (4) billet belt conveyors, identified as OR-D-06-CB1120, OR-D-06-CB2120, OR-D-06-CB1126, and OR-D-06-CB2126.
(6) Two (2) billet vibratory feeders, identified as OR-D-06-VF1125 and OR-D-06-VF2125.
(7) Two (2) trolley car loading stations, collectively identified as OR-D-06-LD1128.
(8) One (1) billet hopper, identified as OR-D-06-HP1135, and five (5) belt conveyors, identified as OR-D-06-CB1150, OR-D-06-CB1160, OR-D-06-CB1170, OR-D-06-CB1180, and OR-D-06-CB1190.

(o) One (1) Finish Product Handling and Loading process, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) Cokonyx belt conveyors, identified as OR-D-08-CB1020, OR-D-08-CB1030, OR-D-08-CB2020, and OR-D-08-CB2030.
(2) One (1) Cokonyx belt conveyor, identified as OR-D-08-CD1035.

CASP Coal Receiving and Handling

(a) Phase 1 CASP C and CASP D coal handling, approved for construction in 2010, consisting of the following:

(1) One (1) feed hopper and conveyor No.1 (PHS1-HC1), with emissions uncontrolled.
(2) Two (2) CASP C coal conveyors, identified as PHS1C-C1 and PHS1C-C2, with emissions uncontrolled.
(3) One (1) CASP C coal feed hopper No.2, identified as CASPC-FH2, with hopper receiving emissions uncontrolled.
(4) Two (2) CASP D coal conveyors, identified as PHS1D-C1 and PHS1D-C2, with emissions uncontrolled.
(5) One (1) CASP D coal feed hopper No.2, identified as CASPD-FH2, with hopper receiving emissions uncontrolled.

(b) Phase 2 CASP coal handling, approved for construction in 2010, consisting of the following:

(1) Two (2) CASP coal conveyors, identified as CASP-C1 and CASP-C2, with emissions uncontrolled.
(2) One (1) CASP rotary stacker CASP-RS1, with emissions uncontrolled.
(3) Four (4) CASP coal conveyor feed hoppers, identified as CASPA-FH1, CASPB-FH1, CASPC-FH1, and CASPD-FH1, with emissions uncontrolled.
(4) Two (2) CASP A coal conveyors, identified as CASPA-C1 and CASPA-C2, with emissions uncontrolled.
(5) One (1) CASP A coal feed hopper No.2, identified as CASPA-FH2, with hopper receiving emissions uncontrolled.
(6) Two (2) CASP B coal conveyors, identified as CASPB-C1 and CASPB-C2, with emissions uncontrolled.
(7) One (1) CASP B coal feed hopper No.2, identified as CASPB-FH2, with hopper receiving emissions uncontrolled.
(8) Two (2) CASP C coal conveyors, identified as CASPC-C1 and CASPC-C2, with emissions uncontrolled.
(9) Two (2) CASP D coal conveyors, identified as CASPD-C1 and CASPD-C2, with emissions uncontrolled.

(c) Storage Piles

(1) One (1) PHS1 intermediate coal storage pile No. 1.
(2) Four (4) PHS1 coal storage piles.
(3) One (1) PHS1 intermediate coal storage pile No. 2.
(4) Four (4) CASP coal storage piles.

CASP Cokonyx Loadout

(a) Two (2) single deck vibratory screener feeders for CASP A, identified as CASPA-VF1 and CASPA-VF2, with emissions uncontrolled.
(b) Two (2) single deck vibratory screener feeders for CASP B, identified as CASPB-VF1 and CASPB-VF2, with emissions uncontrolled.
(c) Two (2) single deck vibratory screener feeders for CASP C, identified as CASPC-VF1 and CASPC-VF2, with emissions uncontrolled.
(d) Two (2) single deck vibratory screener feeders for CASP D, identified as CASPD-VF1 and CASPD-VF2, with emissions uncontrolled.
(e) Two (2) emergency product by-pass bunkers for CASP A, identified as CASPA-EB1 and CASPA-EB2, with emissions uncontrolled.
(f) Two (2) emergency product by-pass bunkers for CASP B, identified as CASPB-EB1 and CASPB-EB2, with emissions uncontrolled.
(g) Two (2) emergency product by-pass bunkers for CASP C, identified as CASPC-EB1 and CASPC-EB2, with emissions uncontrolled.
(h) Two (2) emergency product by-pass bunkers for CASP D, identified as CASPD-EB1 and CASPD-EB2, with emissions uncontrolled.
(i) Two (2) Cokonyx loadout conveyors for CASP A, identified as CKNXC-A1 and CKNXC-A2, with emissions uncontrolled.
(j) Two (2) Cokonyx loadout conveyors for CASP B, identified as CKNXC-B1 and CKNXC-B2, with emissions uncontrolled.
(k) Two (2) Cokonyx loadout conveyors for CASP C, identified as CKNXC-C1 and CKNXC-C2, with emissions uncontrolled.
(l) Two (2) Cokonyx loadout conveyors for CASP D, identified as CKNXC-D1 and CKNXC-D2, with emissions uncontrolled.
(m) One (1) C/D Cokonyx conveyor, identified as CKNXC-C/D, with emissions uncontrolled.
(n) One (1) A/B Cokonyx conveyor, identified as CKNXC-A/B, with emissions uncontrolled.
(o) Two (2) C/D Cokonyx surge bins, collectively identified as CKNXBin-C/D1, with emissions uncontrolled.
(p) Two (2) A/B Cokonyx surge bins, collectively identified as CKNXBin-A/B1, with emissions uncontrolled.
(q) Storage Piles

(1) CASP A/B Cokonyx Emergency Storage Pile.
(2) CASP C/D Cokonyx Emergency Storage Pile.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.20.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10/NOx/SO2/CO [326 IAC 2-2]
Nonattainment New Source Review (NSR) Minor Limit PM2.5 [326 IAC 2-1.1-5]

Pursuant to 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment New Source Review), and in order to render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable to the Carbon Alloy Synthesis Plant (CASP) modifications (Significant Source Modification (SSM) No. 089-28848-00121 and Significant Permit Modification (SPM) No. 089-29236-00121), the Permittee shall comply with the following:

(a) The input of coal to the following facilities shall be less than the limited amount per twelve (12) consecutive month period with compliance determined at the end of each month. The PM emissions shall not exceed 1.68 pounds per kton of coal input, the PM_{10} emissions shall not exceed 0.79 pound per kton of coal input, and the $PM_{2.5}$ emissions shall not exceed 0.12 pound per kton of coal input.

Facility Description	Facility ID (if Applicable)	Limited Input (tons per 12 month period)
Phase 1 CASP C/D Coal Feed Path		
PHS1 intermediate storage pile #1	n/a	750,000
phase 1 coal piles (4 piles)	n/a	750,000 (combined)
CASP C/D hopper feeder & conveyor	PHS1-HC1	750,000
PHS1 intermediate storage pile #2	n/a	750,000
Phase 1 CASP C Coal Feed Path		
CASP C coal feed conveyors	PHS1C-C1, PHS1C-C2	375,000 (each)
Phase 1 CASP D Coal Feed Path		
CASP D coal conveyors	PHS1D-C1, PHS1D-C2	375,000 (each)
Phase 2 CASP A/B/C/D Coal Feed Path		
CASP coal conveyors and CASP rotary stacker	CASP-C1, CASP-C2, CASP-RS1	1,500,000 (each)
four (4) CASP coal storage piles	n/a	1,500,000
Phase 2 CASP C Coal Feed Path		
CASP C - coal feed hopper No.1 and coal conveyors	CASPC-FH1 CASPC-C1, CASPC-C2	375,000 (each)
Phase 2 CASP D Coal Feed Path		
CASP D coal feed hopper No.1 and coal conveyors	CASPD-FH1, CASPD-C1, CASPD-C2	375,000 (each)

(1) The amount of coal handled by the Phase 1 CASP C/D Coal Feed Path facilities (PHS1 intermediate storage pile #1, phase 1 coal piles, PHS1-HC1, PHS1 intermediate storage pile #2) and the Phase 2 CASP A/B/C/D Coal Feed Path facilities (CASP-C1, CASP-C2, CASP-RS1, and CASP coal storage piles) shall be less than 1,500,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(2) The amount of coal handled by the Phase 1 CASP C Coal Feed Path facilities (PHS1C-C1 and PHS1C-C2) and the Phase 2 CASP C Coal Feed Path facilities (CASPC-FH1, CASPC-C1, and CASPC-C2) shall be less than 375,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(3) The amount of coal handled by the Phase 1 CASP D Coal Feed Path facilities (PHS1D-C1 and PHS1D-C2)and the Phase 2 CASP D Coal Feed Path facilities (CASPD-FH1, CASPD-C1, and CASPD-C2) shall be less than 375,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) The input of coal to the following facilities shall be less than the limited amount per twelve (12) consecutive month period with compliance determined at the end of each month. The PM emissions shall not exceed 1.68 pounds per kton of coal input, the PM_{10} emissions shall not exceed 0.79 pound per kton of coal input, and the $PM_{2.5}$ emissions shall not exceed 0.12 pound per kton of coal input.

Facility Description	Facility ID	Limited Input (tons per 12 month period)
CASP A - feed hopper, Conv. #1, Conv. #2, and coal feed hopper	CASPA-FH1, CASPA-C1 CASPA-C2, CASPA-FH2	375,000 (each)
CASP B - feed hopper, Conv. #1, Conv. #2, and coal feed hopper	CASPB-FH1, CASPB-C1 CASPB-C2, CASPB-FH2	375,000 (each)
CASP C coal feed hopper No.2	CASPC-FH2	375,000
CASP D coal feed hopper No.2	CASPD-FH2	375,000

(c) The input of billets or billet fines to the following facilities shall be less than the limited amount per twelve (12) consecutive month period with compliance determined at the end of each month. The PM emissions shall not exceed 0.41 pound per kton of material input, the PM_{10} emissions shall not exceed 0.19 pound per kton of material input, and the $PM_{2.5}$ emissions shall not exceed 0.03 pound per kton of material input.

Facility Description	Facility ID (if Applicable)	Limited Input (tons per 12 month period)
CASP A - Billet Transfer Area		
billet fines hopper, and three (3) billet fine conveyors	OR-A-06-HP1125, OR-A-06-CB1130, OR-A-06-CB1140, OR-A-06-CB1145	50,000 (each)
billet drag conveyer and billet hopper	OR-A-06-CD1110, OR-A-06-HP1115,	375,000 (each)
billet belt conveyors	OR-A-06-CB1120, OR-A-06-CB1126	375,000 (combined)

Facility Description	Facility ID (if Applicable)	Limited Input (tons per 12 month period)
billet belt conveyors	OR-A-06-CB2120, OR-A-06-CB2126	375,000 (combined)
billet vibratory feeders	OR-A-06-VF1125, OR-A-06-VF2126	375,000 (combined)
two (2) trolley loading pans	OR-A-06-LD1128	375,000 (combined)
two (2) trolley cars	OR-A-06-LD1128	375,000 (combined)
billet hopper and five (5) billet drag conveyors	OR-A-06-HP1135, OR-A-06-CD1150, OR-A-06-CD1160, OR-A-06-CD1170, OR-A-06-CD1180, OR-A-06-CD1190	375,000 (each)
CASP B - Billet Transfer Area		
billet fines hopper, and three (3) billet fine conveyors	OR-B-06-HP1125, OR-B-06-CB1130, OR-B-06-CB1140, OR-B-06-CB1145	50,000 (each)
billet drag conveyer and billet hopper	OR-B-06-CD1110, OR-B-06-HP1115,	375,000 (each)
billet belt conveyors	OR-B-06-CB1120, OR-B-06-CB1126	375,000 (combined)
billet belt conveyors	OR-B-06-CB2120, OR-B-06-CB2126	375,000 (combined)
billet vibratory feeders	OR-B-06-VF1125, OR-B-06-VF2126	375,000 (combined)
two (2) trolley loading pans	OR-B-06-LD1128	375,000 (combined)
two (2) trolley cars	OR-B-06-LD1128	375,000 (combined)
billet hopper and five (5) billet drag conveyors	OR-B-06-HP1135, OR-B-06-CD1150, OR-B-06-CD1160, OR-B-06-CD1170, OR-B-06-CD1180, OR-B-06-CD1190	375,000 (each)
CASP C - Billet Transfer Area		
billet fines hopper, and three (3) billet fine conveyors	OR-C-06-HP1125, OR-C-06-CB1130, OR-C-06-CB1140, OR-C-06-CB1145	50,000 (each)
billet drag conveyer and billet hopper	OR-C-06-CD1110, OR-C-06-HP1115,	375,000 (each)
billet belt conveyors	OR-C-06-CB1120, OR-C-06-CB1126	375,000 (combined)
billet belt conveyors	OR-C-06-CB2120, OR-C-06-CB2126	375,000 (combined)
billet vibratory feeders	OR-C-06-VF1125, OR-C-06-VF2126	375,000 (combined)
two (2) trolley loading pans	OR-C-06-LD1128	375,000 (combined)
two (2) trolley cars	OR-C-06-LD1128	375,000 (combined)
billet hopper and five (5) billet drag conveyors	OR-C-06-HP1135, OR-C-06-CD1150, OR-C-06-CD1160, OR-C-06-CD1170, OR-C-06-CD1180, OR-C-06-CD1190	375,000 (each)

Facility Description	Facility ID (if Applicable)	Limited Input (tons per 12 month period)
CASP D - Billet Transfer Area		
billet fines hopper, and three (3) billet fine conveyors	OR-D-06-HP1125, OR-D-06-CB1130, OR-D-06-CB1140, OR-D-06-CB1145	50,000 (each)
billet drag conveyer and billet hopper	OR-D-06-CD1110, OR-D-06-HP1115,	375,000 (each)
billet belt conveyors	OR-D-06-CB1120, OR-D-06-CB1126	375,000 (combined)
billet belt conveyors	OR-D-06-CB2120, OR-D-06-CB2126	375,000 (combined)
billet vibratory feeders	OR-D-06-VF1125, OR-D-06-VF2126	375,000 (combined)
two (2) trolley loading pans	OR-D-06-LD1128	375,000 (combined)
two (2) trolley cars	OR-D-06-LD1128	375,000 (combined)
billet hopper and five (5) billet drag conveyors	OR-D-06-HP1135, OR-D-06-CD1150, OR-D-06-CD1160, OR-D-06-CD1170, OR-D-06-CD1180, OR-D-06-CD1190	375,000 (each)

(d) The input of Cokonyx to the following facilities shall be less than the limited amount per twelve (12) consecutive month period with compliance determined at the end of each month. The PM emissions shall not exceed 1.90 pounds per kton of Cokonyx input, the PM_{10} emissions shall not exceed 0.90 pound per kton of Cokonyx input, and the $PM_{2.5}$ emissions shall not exceed 0.14 pound per kton of Cokonyx input.

Facility Description	Facility ID (if Applicable)	Limited Input (tons per 12 month period)
CASP A - Finish Product Handling & Loading Process		
Cokonyx belt conveyors	OR-A-08-CB1020, OR-A-08-CB1030	300,000 (combined)
Cokonyx belt conveyors	OR-A-08-CB2020, OR-A-08-CB2030	300,000 (combined)
Cokonyx belt conveyor	OR-A-08-CB1035	300,000
CASP B - Finish Product Handling & Loading Process		
Cokonyx belt conveyors	OR-B-08-CB1020, OR-B-08-CB1030	300,000 (combined)
Cokonyx belt conveyors	OR-B-08-CB2020, OR-B-08-CB2030	300,000 (combined)
Cokonyx belt conveyor	OR-B-08-CB1035	300,000
CASP C - Finish Product Handling & Loading Process		
Cokonyx belt conveyors	OR-C-08-CB1020, OR-C-08-CB1030	300,000 (combined)
Cokonyx belt conveyors	OR-C-08-CB2020, OR-C-08-CB2030	300,000 (combined)
Cokonyx belt conveyor	OR-C-08-CB1035	300,000

Facility Description	Facility ID (if Applicable)	Limited Input (tons per 12 month period)
CASP D - Finish Product Handling & Loading Process		
Cokonyx belt conveyors	OR-D-08-CB1020, OR-D-08-CB1030	300,000 (combined)
Cokonyx belt conveyors	OR-D-08-CB2020, OR-D-08-CB2030	300,000 (combined)
Cokonyx belt conveyor	OR-D-08-CB1035	300,000

(e) The input of Cokonyx to the following facilities shall be less than the limited amount per twelve (12) consecutive month period with compliance determined at the end of each month. The PM emissions shall not exceed 15.99 pounds per kton of Cokonyx input, the PM_{10} emissions shall not exceed 7.56 pounds per kton of Cokonyx input, and the $PM_{2.5}$ emissions shall not exceed 1.15 pounds per kton of Cokonyx input.

Facility Description	Facility ID (if Applicable)	Limited Input (tons per 12 month period)
CASP A - two (2) vibratory feeders	CASPA-VF1, CASPA-VF2	300,000 (combined)
CASP A - two (2) emergency bypass bunkers	CASPA-EB1, CASPA-EB2	300,000 (combined)
CASP A - Cokonyx conveyors	CKNXC-A1, CKNXC-A2	300,000 (combined)
CASP B - two (2) vibratory feeders	CASPB-VF1, CASPB-VF2	300,000 (combined)
CASP B - two (2) emergency bypass bunkers	CASPB-EB1, CASPA-EB2	300,000 (combined)
CASP A/B Emergency Storage Pile	n/a	600,000
CASP B - Cokonyx conveyors	CKNXC-B1, CKNXC-B2	300,000 (combined)
CASP A & B - Cokonyx conveyor	CKNXC-A/B	600,000
CASP A & B - Cokonyx storage bins	CKNXBin-A/B	600,000
CASP C - two (2) vibratory feeders	CASPC-VF1, CASPC-VF2	300,000 (combined)
CASP C - two (2) emergency bypass bunkers	CASPC-EB1, CASPC-EB2	300,000 (combined)
CASP C - Cokonyx conveyors	CKNXC-C1, CKNXC-C2	300,000 (combined)
CASP D - two (2) vibratory feeders	CASPD-VF1, CASPD-VF2	300,000 (combined)
CASP D - two (2) emergency bypass bunkers	CASPD-EB1, CASPD-EB2	300,000 (combined)
CASP C/D Emergency Storage Pile	n/a	600,000
CASP D - Cokonyx conveyors	CKNXC-D1, CKNXC-D2	300,000 (combined)
CASP C & D - Cokonyx conveyor	CKNXC-C/D	600,000
CASP C & D - Cokonyx storage bins	CKNXBin-C/D	600,000
Cokonyx loadout to railcar	CKNXLoadout	1,200,000

Compliance with these limits, in conjunction with other limits taken as part of the CASP modification (SSM 089-22848-00121 and SPM 089-29236-00121), will ensure the following:

(f) The PM and PM10 emissions increase from the CASP modifications shall be less than twenty-five (25) and fifteen (15) tons per year, respectively. Therefore, the requirements of 326 IAC 2-2 (PSD) are rendered not applicable to these modifications.

(g) The PM2.5 emissions increase from the CASP modifications shall be less than ten (10) tons per year. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) are rendered not applicable to these modifications.

D.20.2 Fugitive Dust Emission Limitations [326 IAC 6-4-2][326 IAC 6.8-10-3]

(a) Pursuant to 326 IAC 6-4-2:

(1) The billet transfer areas, finish product handling and loading processes, coal receiving and handling facilities, and Cokonyx loadout facilities, roads and storage piles, shall be in violation of this rule (326 IAC 6-4) if any of the following criteria are violated:

(A) A source or combination of sources which cause to exist fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations as determined by the following formula:

$$P = \frac{100\,(R) - U)}{U}$$

Where
P = Percentage increase
R = Number of particles of fugitive dust measured at downward receptor site
U = Number of particles of fugitive dust measured at upwind or background site

(B) The fugitive dust is comprised of fifty percent (50%) or more respirable dust, then the percent increase of dust concentration in subdivision (1) of this section shall be modified as follows:

$$PR = (1.5 \pm N)\,P$$

Where
N = Fraction of fugitive dust that is respirable dust;
PR = allowable percentage increase in dust concentration above background; and
P = no value greater than sixty-seven percent (67%).

(C) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.

(D) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed

in subdivisions (1), (2) or (3) of this section. 326 IAC 6-4-2(4) is not federally enforceable.

(2) Pursuant to 326 IAC 6-4-6(6) (Exceptions), fugitive dust from a source caused by adverse meteorological conditions will be considered an exception to this rule (326 IAC 6-4) and therefore not in violation.

(b) Pursuant to 326 IAC 6.8-10-3 Lake County Fugitive Particulate Matter Emissions Limitations, fugitive emissions from the billet transfer areas, finish product handling and loading processes, coal receiving and handling facilities, and Cokonyx loadout facilities, roads and storage piles, shall comply with the emission limitations in Section C.5 - Fugitive Dust Emissions.

D.20.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for each of the facilities and control devices listed in this section. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.20.4 Particulate Matter Control

Pursuant to 326 IAC 6.8-10-3 (Lake County Fugitive Particulate Matter Control Requirements), opacity from the activities shall be determined as follows:

(a) Paved Roads and Parking Lots
The average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass. The three (3) opacity readings for each vehicle pass shall be taken as follows:

(1) The first will be taken at the time of emission generation.

(2) The second will be taken five (5) seconds later.

(3) The third will be taken five (5) seconds later or ten (10) seconds after the first.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.

(b) Unpaved Roads and Parking Lots
The fugitive particulate emissions from unpaved roads shall be controlled by the implementation of a work program and work practice under the fugitive dust control plan.

(c) Batch Transfer
The average instantaneous opacity shall consist of the average of three (3) opacity readings taken five (5) seconds, ten (10) seconds, and fifteen (15) seconds after the end of one (1) batch loading or unloading operation. The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume.

(d) Continuous Transfer of Material Unto and Out of Storage Piles
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9. The opacity readings shall be taken at least four (4) feet from the point of origin.

(e) Wind Erosion from Storage Piles and Exposed Areas
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9, except that the opacity shall be observed at approximately four (4) feet from the surface at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. The limitations may not apply during periods when application of fugitive particulate control measures is either ineffective or unreasonable due to sustained very high wind speeds. During such periods, the company must continue to implement all reasonable fugitive particulate control measures and maintain records documenting the application of measures and the basis for a claim that meeting the opacity limitation was not reasonable given prevailing wind conditions.

(f) Material Transported by Truck or Rail
Compliance with this limitation shall be determined by 40 CFR 60, Appendix A, Method 22, except that the observation shall be taken at approximately right angles to the prevailing wind from the leeward side of the truck or railroad car. Material transported by truck or rail that is enclosed and covered shall be considered in compliance with the in plant transportation requirement.

(g) Material Transported by Front End Loader or Skip Hoist
Compliance with this limitation shall be determined by the average of three (3) opacity readings taken at five (5) second intervals. The three (3) opacity readings shall be taken as follows:

(1) The first will be taken at the time of emission generation.

(2) The second will be taken five (5) seconds later.

(3) The third will be taken five (5) seconds later or ten (10) seconds after the first.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand at least fifteen (15) feet from the plume approximately and at right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.

(h) Material Processing Limitations

(1) Compliance with stack opacity limitations from material processing facilities shall be determined using 40 CFR 60, Appendix A, Method 9.

(2) Compliance with the opacity limitations for fugitive particulate emissions from material processing equipment, except from a crusher at which a capture system is not used, shall be determined using 40 CFR 60, Appendix A, Method 9.

(3) Compliance with the opacity limitations for fugitive particulate emissions from a crusher at which a capture system is not used, shall be determined using 40 CFR 60, Appendix A, Method 9.

(4) Compliance with the opacity limitations for fugitive particulate emissions from a building enclosing all or part of the material processing equipment, except from a vent in the building shall be determined using 40 CFR 60, Appendix A, Method 22.

(5) Compliance with the opacity limitations for fugitive particulate emissions from building vents shall be determined using 40 CFR 60, Appendix A, Method 5 or 17 or 40 CFR 60, Appendix A, Method 9.

(i) Dust Handling Equipment
Compliance with this standard shall be determined by 40 CFR 60, Appendix A, Method 9.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.20.5 Record Keeping Requirements

(a) To document the compliance status with Condition D.20.1(a), the Permittee shall maintain records of the coal input to each of the facilities listed in Condition D.20.1(a).

(b) To document the compliance status with Condition D.20.1(a)(1), the Permittee shall maintain records of the coal handled by the Phase 1 CASP C/D Coal Feed Path and the Phase 2 CASP A/B/C/D Coal Feed Path.

(c) To document the compliance status with Condition D.20.1(a)(2), the Permittee shall maintain records of the coal handled by the Phase 1 CASP C Coal Feed Path and the Phase 2 CASP C Coal Feed Path.

(d) To document the compliance status with Condition D.20.1(a)(3), the Permittee shall maintain records of the coal handled by the Phase 1 CASP D Coal Feed Path and the Phase 2 CASP D Coal Feed Path.

(e) To document the compliance status with Condition D.20.1(b), the Permittee shall maintain records of the coal input to each of the facilities listed in Condition D.20.1(b).

(f) To document the compliance status with Condition D.20.1(c), the Permittee shall maintain records of the billet and billet fines input to each of the facilities listed in Condition D.20.1(c).

(g) To document the compliance status with Condition D.20.1(d) and (e), the Permittee shall maintain records of the Cokonyx input to each of the facilities listed in Condition D.20.1(d) and (e).

(h) Pursuant to 326 IAC 6.8-10-4(4) (Lake County Fugitive Particulate Matter Control Requirements):

(1) The source shall keep the following documentation to show compliance with each of its control measures and control practices:

(A) A map or diagram showing the location of all emission sources controlled, including the location, identification, length, and width of roadways.

(B) For each application of water or chemical solution to roadways, the following shall be recorded:

(i) The name and location of the roadway controlled

(ii) Application rate
(iii) Time of each application
(iv) Width of each application
(v) Identification of each method of application
(vi) Total quantity of water or chemical used for each application
(vii) For each application of chemical solution, the concentration and identity of the chemical
(viii) The material data safety sheets for each chemical

(C) For application of physical or chemical control agents not covered by clause (B), the following:

(i) The name of the agent
(ii) Location of application
(iii) Application rate
(iv) Total quantity of agent used
(v) If diluted, percent of concentration
(vi) The material data safety sheets for each chemical

(D) A log recording incidents when control measures were not used and a statement of explanation.

(E) Copies of all records required by this section shall be submitted to the department within twenty (20) working days of a written request by the department.

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.20.6 Reporting Requirements

(a) A quarterly report and a quarterly summary of the information to document the compliance status with Condition D.20.1 shall be submitted not later than thirty (30) days after the end of the quarter being reported.

(b) Pursuant to 326 IAC 6.8-10-4(4)(G) (Lake County Fugitive Particulate Matter Control Requirements), a quarterly report shall be submitted to the department stating the following:

(1) The dates any required control measures were not implemented

(2) A listing of those control measures

(3) The reasons that the control measures were not implemented

(4) Any corrective action taken

(c) These reports shall be submitted not later than thirty (30) calendar days following the end of each calendar quarter. Section C – General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition. The reports submitted by the Permittee do require a certification that

meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Modification No. 7:

New Section D.21 - Facility Operation Conditions has been added to incorporate the applicable Part 70 requirements for the proposed diesel-fired emergency generators, natural gas-fired emergency generators, and insignificant activities.

Section D.21 has been added as follows:

Section D.21 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Note: Complete Descriptions are shown in Sections A.2 and A.3.

CASP A

(q) Two (2) diesel-fired emergency generators, identified as EGA1 and EGA2, approved for construction in 2010, each with a maximum rated output of 1650 kW.

(r) One (1) natural gas-fired emergency generator, identified as EGA3, approved for construction in 2010, with a maximum rated output of 450 kW.

CASP B

(q) Two (2) diesel-fired emergency generators, identified as EGB1 and EGB2, approved for construction in 2010, each with a maximum rated output of 1650 kW.

(r) One (1) natural gas-fired emergency generator, identified as EGB3, approved for construction in 2010, with a maximum rated output of 450 kW.

CASP C

(q) Two (2) diesel-fired emergency generators, identified as EGC1 and EGC2, approved for construction in 2010, each with a maximum rated output of 1650 kW.

(r) One (1) natural gas-fired emergency generator, identified as EGC3, approved for construction in 2010, with a maximum rated output of 450 kW.

CASP D

(q) Two (2) diesel-fired emergency generators, identified as EGD1 and EGD2, approved for construction in 2010, each with a maximum rated output of 1650 kW

(r) One (1) natural gas-fired emergency generator, identified as EGD3, approved for construction in 2010, with a maximum rated output of 450 kW.

(d) Specifically regulated insignificant activities (Carbon Alloy Synthesis Plants):

CASP Module A

(1) One (1) lubricating oil storage tank, identified as STO3 A, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 A, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT A1 and PFRCT A2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPA, approved for construction in 2010, with a maximum rated output of 315 Hp.

(5) One (1) coal tar storage tank, identified as STO1 A, approved for construction in 2010, with a storage capacity of 10,000 gallons.

CASP Module B

(1) One (1) lubricating oil storage tank, identified as STO3 B, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 B, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT B1 and PFRCT B2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPB, approved for construction in 2010, with a maximum rated output of 315 Hp.

(5) Two (2) coal tar storage tanks, identified as STO1 B and STO2 B, approved for construction in 2010, each with a storage capacity of 10,000 gallons.

CASP Module C

(1) One (1) lubricating oil storage tank, identified as STO3 C, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 C, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT C and PFRCT C2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPC, approved for construction in 2010, with a maximum rated output of 315 Hp.

(5) Two (2) coal tar storage tanks, identified as STO1 C and STO2 C, approved for construction in 2010, each with a storage capacity of 10,000 gallons.

CASP Module D

(1) One (1) lubricating oil storage tank, identified as STO3 D, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(2) One (1) diesel storage tank, identified as STO4 D, approved for construction in 2010, with a storage capacity of 1,000 gallons.

(3) Two (2) noncontact cooling tower systems, identified as PFRCT D1 and PFRCT D2, approved for construction in 2010, each rated at 20,000 gallons per minute.

(4) One (1) diesel-fired stationary fire pump, identified as FPD, approved for construction in 2010, with a maximum rated output of 315 Hp.

(5) One (1) coal tar storage tank, identified as STO1 D, approved for construction in 2010, with a storage capacity of 10,000 gallons.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.21.1 Particulate Emission Limitation [326 IAC 6.8-1-2(a)]

Pursuant to 326 IAC 6.8-1-2(a), the Permittee shall not allow or permit discharge to the atmosphere any gases which contain particulate matter in excess of 0.03 grain per dry standard cubic foot (dscf) from each engine and cooling tower system listed in this section.

D.21.2 Volatile Organic Liquid Storage Vessels [326 IAC 8-9-1]

(a) Pursuant to 326 IAC 8-9-1 (a) and (b) (Volatile Organic Liquid Storage Vessels), on and after October 1, 1995, stationary vessels used to store volatile organic liquids (VOL), that are located in Lake County with a capacity of less than thirty nine thousand (39,000) gallons are subject to the reporting and record keeping requirements of this rule. The VOL storage vessels are exempted from all other provisions of this rule.

(b) Pursuant to 326 IAC 8-9-6 (a) and (b), the Permittee of each Volatile Organic Liquid Storage vessel to which 326 IAC 8-9-1 applies shall maintain the following records for the life of the vessel and submit a report to IDEM, OAQ containing the following for each vessel:

(1) The vessel identification number,

(2) The vessel dimensions, and

(3) The vessel capacity.

Modification No. 8:

New Section H.1- Facility Operation Conditions - NSPS, SUBPART Dc has been added to incorporate the requirements of 40 CFR Part 60, Subpart Dc applicable to the proposed Particle Fusion Reactors.

Section H.1 has been added as follows:

SECTION H.1 FACILITY OPERATION CONDITIONS - NSPS, SUBPART Dc

Facility Description [326 IAC 2-7-5(15)]: Note: Complete Descriptions are shown in Section A.2.

CASP A

(m) One (1) Particle Fusion Reactor (PFR) afterburner, identified as PFRAB A1, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-A-10-SR1010), one (1) cyclone (OR-A-10-CY-1115), and one (1) baghouse (OR-A-10-DC1020), in series, exhausting to stack OR-A-10-ST1025.

(n) One (1) Particle Fusion Reactor (PFR) afterburner, identified as PFRAB A2, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-A-10-SR2010), one (1) cyclone (OR-A-10-CY-2115), and one (1) baghouse (OR-A-10-DC2020), in series, exhausting to stack OR-A-10-ST2025.

CASP B

(m) One (1) Particle Fusion Reactor (PFR) afterburner, identified as PFRAB B1, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-B-10-SR1010), one (1) cyclone (OR-B-10-CY-1115), and one (1) baghouse (OR-B-10-DC1020), in series, exhausting to stack OR-B-10-ST1025.

(n) One (1) Particle Fusion Reactor (PFR)) afterburner, identified as PFRAB B2, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-B10-SR2010), one (1) cyclone (OR-B-10-CY-2115), and one (1) baghouse (OR-B-10-DC2020), in series, exhausting to stack OR-B-10-ST2025.

CASP C

(m) One (1) Particle Fusion Reactor (PFR) afterburner, identified as PFRAB C1, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-C-10-SR1010), one (1) cyclone (OR-C-10-CY-1115), and one (1) baghouse (OR-C-09-DC1020), in series, exhausting to stack OR-C-10-ST1025.

(n) One (1) Particle Fusion Reactor (PFR) afterburner, identified as PFRAB C2, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-C-10-SR2010), one (1) cyclone (OR-C-10-CY-2115), and one (1) baghouse (OR-C-10-DC2020), in series, exhausting to stack OR-C-10-ST2025.

CASP D

(m) One (1) Particle Fusion Reactor (PFR) afterburner, identified as PFRAB D1, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-D-10-SR1010), one (1) cyclone (OR-D-10-CY-1115), and one (1) baghouse (OR-D-109-DC1020), in series, exhausting to stack OR-D-10-ST1025.

(n) One (1) Particle Fusion Reactor (PFR) afterburner, identified as PFRAB D2, exhausting through an clean energy recovery process (CERP) to one (1) spray scrubber (OR-D-10-SR2010), one (1) cyclone (OR-D-10-CY-2115), and one (1) baghouse (OR-D-10-DC2020), in series, exhausting to stack OR-D-10-ST2025.

Under 40 CFR 60, Subpart Dc, each afterburner listed in this section is considered an affected steam generating unit.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

H.1.1 General Provisions Relating to New Source Performance Standards [40 CFR Part 60,

Subpart A] [326 IAC 12-1]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR Part 60, Subpart Dc.

(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

H.1.2 Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units [40 CFR Part 60, Subpart Dc] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart Dc, the Permittee shall comply with the provisions of the Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (included as Attachment B of this permit), which are incorporated by reference as 326 IAC 12, as specified as follows:

(4) 40 CFR 60.40c (a), (b), and (c)
(5) 40 CFR 60.41c
(6) **40 CFR 60.48c (a)(1), (a)(2), (a)(3), (g)(1), (g)(2), (i), and (j)**

Modification No. 9:

New Section H.2- Facility Operation Conditions - NSPS, SUBPART Y has been added to incorporate the requirements of 40 CFR Part 60, Subpart Y applicable to the proposed Carborec, Carborec billet, and coal handling, storage, crushing and drying facilities.

Section H.2 has been added as follows:

SECTION H.2 FACILITY OPERATION CONDITIONS - NSPS, SUBPART Y

Facility Description [326 IAC 2-7-5(15)]: Note: Complete Descriptions are shown in Section A.2.

CASP A

(a) Raw Material Receiving Handling and Silos A, identified as RMRHSA, consisting of the following:

(1) One (1) CDA1 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) baghouse (OR-A-01-DC1105), exhausting to stack OR-A-01-ST1105.
(2) One (1) CDA2 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) dust collector (OR-A-01-DC2105), exhausting to stack OR-A-01-ST2105.
(3) Five (5) dry coal storage silos, ducted to dedicated baghouses (OR-A-02-DC1070, OR-A-02-DC2070, OR-A-02-DC3070, OR-A-02-DC4070, and OR-A-02-DC5070, respectively), exhausting to stacks OR-A-02-ST1070, OR-A-02-ST2070, OR-A-02-ST3070, OR-A-02-ST4070, and OR-A-02-ST5070, respectively.

(4) Five (5) blend #1 weigh feeders and one (1) drag conveyor, ducted to one (1) baghouse (OR-A-03-DC1105), exhausting to stack OR-A-03-ST1105.

(5) Four (4) blend #1 feed hoppers and two (2) blend #1 hopper feed drag conveyors, ducted to one (1) baghouse (OR-A-04-DC1105), exhausting to stack OR-A-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSA facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDA1, ducted to one (1) cyclone (OR-A-01-CY-1305) and one (1) dust collector (OR-A-01-DC1205), in series, exhausting to stack OR-A-01-ST115. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCA1, ducted to one (1) dust collector (OR-A-02-DC1105), exhausting to stack OR-A-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDA2, ducted to one (1) cyclone (OR-A-01-CY-2305) and one (1) dust collector (OR-A-01-DC2205), in series, exhausting to stack OR-A-01-ST2215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCA2, ducted to one (1) dust collector (OR-A-02-DC2105), exhausting to stack OR-A-02-ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(k) One (1) Carborec Storage and Blending Area A, identified as CBSBA, consisting of the following:

(1) Carborec crusher feed drag conveyors, ducted to a baghouse (OR-A-05-DC1205), exhausting to stack OR-A-05-ST1205.

(2) Six (6) weigh feeders and blend #2 drag conveyors, ducted to a baghouse (OR-A-05-DC1405), exhausting to stack OR-A-05-ST1405.

(3) One (1) Carborec storage silo, ducted to a baghouse (OR-A-05-DC6070), exhausting to stack OR-A-05-ST6070.

(4) One (1) blend #2 surge bin, ducted to a baghouse (OR-A-06-DC1405), exhausting to stack OR-A-06-ST1405.

(5) Three (3) blend #2 weigh feeders, blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, ducted to a baghouse (OR-A-06-DC1205), exhausting to stack OR-A-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

CASP B

(a) Raw Material Receiving Handling and Silos B, identified as RMRHSB, approved for construction in 2010, consisting of the following:

(1) One (1) CDB1 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) baghouse (OR-B-01-DC1105), exhausting to stack OR-B-01-ST1105.

(2) One (1) CDB2 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) dust collector (OR-B-01-DC2105), exhausting to stack OR-B-01-ST2105.

(3) Five (5) dry coal storage silos, ducted to dedicated baghouses (OR-B-02-DC1070, OR-B-02-DC2070, OR-B-02-DC3070, OR-B-02-DC4070, and OR-B-02-DC5070, respectively), exhausting to stacks OR-B-02-ST1070, OR-B-02-ST2070, OR-B-02-ST3070, OR-B-02-ST4070, and OR-B-02-ST5070, respectively.

(4) Five (5) blend #1 weigh feeders and one (1) drag conveyor, ducted to one (1) baghouse (OR-B-03-DC1105), exhausting to stack OR-B-03-ST1105.

(5) Four (4) blend #1 feed hoppers and two (2) blend #1 hopper feed drag conveyors, ducted to one (1) baghouse (OR-B-04-DC1105), exhausting to stack OR-B-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSB facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDB1, ducted to one (1) cyclone (OR-B-01-CY-1305) and one (1) dust collector (OR-B-01-DC1205), in series, exhausting to stack OR-B-01-ST1215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCB1, ducted to one (1) dust collector (OR-B-02-DC1105), exhausting to stack OR-B-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDB2, ducted to one (1) cyclone (OR-B-01-CY-2305) and one (1) dust collector (OR-B-01-DC2205), in series, exhausting to stack OR-B-01-ST2215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCB2, ducted to one (1) dust collector (OR-B-02-DC2105), exhausting to stack OR-B-02-ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(k) One (1) Carborec Storage and Blending Area B, identified as CBSBB, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, ducted to a baghouse (OR-B-05-DC1205), exhausting to stack OR-B-05-DC1205.

(2) Six (6) weigh feeders and blend #2 drag conveyors, ducted to a baghouse (OR-B-05-DC1405), exhausting to stack OR-B-05-DC1405.

(3) One (1) Carborec storage silo, ducted to a baghouse (OR-B-05-DC6070), exhausting to stack OR-B-05-ST6070.

(4) One (1) blend #2 surge bin, ducted to a baghouse (OR-B-06-DC1405), exhausting to stack OR-B-06-ST1405.

(5) Three (3) blend #2 weigh feeders, blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, ducted to a baghouse (OR-B-06-DC1205), exhausting to stack OR-B-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

CASP C

(a) Raw Material Receiving Handling and Silos C, identified as RMRHSC, approved for construction in 2010, consisting of the following:

(1) One (1) CDC1 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) baghouse (OR-C-01-DC1105), exhausting to stack OR-C-01-ST1105.
(2) One (1) CDC2 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) dust collector (OR-C-01-DC2105), exhausting to stack OR-C-01-ST2105.
(3) Five (5) dry coal storage silos, ducted to dedicated baghouses (OR-C-02-DC1070, OR-C-02-DC2070, OR-C-02-DC3070, OR-C-02-DC4070, and OR-C-02-DC5070, respectively), exhausting to stacks OR-C-02-ST1070, OR-C-02-ST2070, OR-C-02-ST3070, OR-C-02-ST4070, and OR-C-02-ST5070, respectively.
(4) Five (5) blend #1 weigh feeders and one (1) drag conveyor, ducted to one (1) baghouse (OR-C-03-DC1105), exhausting to stack OR-C-03-ST1105.
(5) Four (4) blend #1 feed hoppers and two (2) blend #1 hopper feed drag conveyors, ducted to one (1) baghouse (OR-C-04-DC1105), exhausting to stack OR-C-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSC facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDC1, ducted to one (1) cyclone (OR-C-01-CY-1305) and one (1) dust collector (OR-C-01-DC1205), in series, exhausting to stack OR-C-01-ST1215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCC1, ducted to one (1) dust collector (OR-C-02-DC1105), exhausting to stack OR-C-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDC2, ducted to one (1) cyclone (OR-C-01-CY-2305) and one (1) dust collector (OR-C-01-DC2205), in series, exhausting to stack OR-C-01-ST2215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCC2, ducted to one (1) dust collector (OR-C-02-DC2105), exhausting to stack OR-C-02-ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(k) One (1) Carborec Storage and Blending Area C, identified as CBSBC, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, ducted to a baghouse (OR-C-05-DC1205), exhausting to stack OR-C-05-ST1205.
(2) Six (6) weigh feeders and blend #2 drag conveyors, ducted to a baghouse (OR-C-05-DC1405), exhausting to stack OR-C-05-ST1405.
(3) One (1) Carborec storage silo, ducted to a baghouse (OR-C-05-DC6070), exhausting to stack OR-C-05-ST6070.
(4) One (1) blend #2 surge bin, ducted to a baghouse (OR-C-06-DC1405), exhausting to stack OR-C-06-ST1405.
(5) Three (3) blend #2 weigh feeders, blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, ducted to a baghouse (OR-C-06-DC1205), exhausting to stack OR-C-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

CASP D

(a) Raw Material Receiving Handling and Silos D, identified as RMRHSD, approved for construction in 2010, consisting of the following:

(1) One (1) CDD1 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) baghouse (OR-D-01-DC1105), exhausting to stack OR-D-01-ST1105.
(2) One (1) CDD2 wet coal feed hopper discharge, one (1) vibratory feeder, and associated drag conveyors, ducted to one (1) dust collector (OR-D-01-DC2105), exhausting to stack OR-D-01-ST2105.
(3) Five (5) dry coal storage silos, ducted to dedicated baghouses (OR-D-02-DC1070, OR-D-02-DC2070, OR-D-02-DC3070, OR-D-02-DC4070, and OR-D-02-DC5070, respectively), exhausting to stacks OR-D-02-ST1070, OR-D-02-ST2070, OR-D-02-ST3070, OR-D-02-ST4070, and OR-D-02-ST5070, respectively.
(4) Five (5) blend #1 weigh feeders and one (1) drag conveyor, ducted to one (1) baghouse (OR-D-03-DC1105), exhausting to stack OR-D-03-ST1105.
(5) Four (4) blend #1 feed hoppers and two (2) blend #1 hopper feed drag conveyors, ducted to one (1) baghouse (OR-D-04-DC1105), exhausting to stack OR-D-04-ST1105.

Under 40 CFR 60, Subpart Y, the RMRHSD facilities are considered coal processing and conveying equipment.

(b) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDD1, ducted to one (1) cyclone (OR-D-01-CY-1305) and one (1) dust collector (OR-D-01-DC1205), in series, exhausting to stack OR-D-01-ST1215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(c) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCD1, ducted to one (1) dust collector (OR-D-02-DC1105), exhausting to stack OR-D-02-ST1105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(d) One (1) coal dryer and associated dried coal conveyors, collectively identified as CDD2, ducted to one (1) cyclone (OR-D-01-CY-2305) and one (1) dust collector (OR-D-01-DC2205), in series, exhausting to stack OR-D-01-ST2215. Under 40 CFR 60, Subpart Y, the dryer is considered a thermal dryer and the associated conveyors are considered coal conveying equipment.

(e) One (1) coal crusher and associated crushed coal conveyors, collectively identified as CCD2, ducted to one (1) dust collector (OR-D-02-DC2105), exhausting to stack OR-D-02-ST2105. Under 40 CFR 60, Subpart Y, this is considered coal processing and conveying equipment.

(k) One (1) Carborec Storage and Blending Area D, identified as CBSBD, approved for construction in 2010, consisting of the following:

(1) Carborec crusher feed drag conveyors, ducted to a baghouse (OR-D-05-DC1205), exhausting to stack OR-D-05-ST1205.
(2) Six (6) weigh feeders and blend #2 drag conveyors, ducted to a baghouse (OR-D-05-DC1405), exhausting to stack OR-D-05-ST1405.
(3) One (1) Carborec storage silo, ducted to a baghouse (OR-D-05-DC6070), exhausting to stack OR-D-05-ST6070.
(4) One (1) blend #2 surge bin, ducted to a baghouse (OR-D-06-DC1405), exhausting to stack OR-D-06-ST1405.
(5) Three (3) blend #2 weigh feeders, blend #2 drag conveyors, three (3) blend #2 crushers, three (3) hi-intensive mixers, three (3) pug mills, three (3) densifers, billet belt conveyors, one (1) billet roller screener, and one (1) billet fines weigh feeder, ducted to a baghouse (OR-D-06-DC1205), exhausting to stack OR-D-06-ST1205.

Under 40 CFR 60, Subpart Y, these facilities are considered coal processing and conveying equipment, or coal storage systems.

CASP Coal Receiving and Handling

(a) Phase 1 CASP C and CASP D coal handling, approved for construction in 2010, consisting of the following:

(1) One (1) feed hopper and conveyor No.1 (PHS1-HC1), with emissions uncontrolled.
(2) Two (2) CASP C coal conveyors, identified as PHS1C-C1 and PHS1C-C2, with emissions uncontrolled.
(3) One (1) CASP C coal feed hopper No.2, identified as CASPC-FH2, with hopper receiving emissions uncontrolled.
(4) Two (2) CASP D coal conveyors, identified as PHS1D-C1 and PHS1D-C2, with emissions uncontrolled.
(5) One (1) CASP D coal feed hopper No.2, identified as CASPD-FH2, with hopper receiving emissions uncontrolled.

(b) Phase 2 CASP coal handling, approved for construction in 2010, consisting of the following:

(1) Two (2) CASP coal conveyors, identified as CASP-C1 and CASP-C2, with emissions uncontrolled.
(2) One (1) CASP rotary stacker CASP-RS1, with emissions uncontrolled.
(3) Four (4) CASP coal conveyor feed hoppers, identified as CASPA-FH1, CASPB-FH1, CASPC-FH1, and CASPD-FH1, with emissions uncontrolled.

(4) Two (2) CASP A coal conveyors, identified as CASPA-C1 and CASPA-C2, with emissions uncontrolled.
(5) One (1) CASP A coal feed hopper No.2, identified as CASPA-FH2, with hopper receiving emissions uncontrolled.
(6) Two (2) CASP B coal conveyors, identified as CASPB-C1 and CASPB-C2, with emissions uncontrolled.
(7) One (1) CASP B coal feed hopper No.2, identified as CASPB-FH2, with hopper receiving emissions uncontrolled.
(8) Two (2) CASP C coal conveyors, identified as CASPC-C1 and CASPC-C2, with emissions uncontrolled.
(9) Two (2) CASP D coal conveyors, identified as CASPD-C1 and CASPD-C2, with emissions uncontrolled.

Under 40 CFR 60, Subpart Y, the CASP Raw Material Receiving and Handling facilities are considered coal processing and conveying equipment, and coal storage systems.

(c) Storage Piles

(1) One (1) PHS1 intermediate coal storage pile No. 1.
(2) Four (4) PHS1 coal storage piles.
(3) One (1) PHS1 intermediate coal storage pile No. 2.
(4) Four (4) CASP coal storage piles.

Under 40 CFR 60, Subpart Y, these storage piles are each considered open storage piles.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

H.2.1 General Provisions Relating to New Source Performance Standards [40 CFR Part 60, Subpart A] [326 IAC 12-1]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR Part 60, Subpart Y.

(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

H.2.2 Standards of Performance for Coal Preparation Plants [40 CFR Part 60, Subpart Y] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart Y, the Permittee shall comply with the provisions of the Standard of Performance for Coal Preparation Plants (included as Attachment C of this permit), which are incorporated by reference as 326 IAC 12, as specified as follows:

(9) 40 CFR 60.250 (a) and (d)

(10) 40 CFR 60.251
(11) 40 CFR 60.252 (b)(1)(i), (b)(2)(iii), (b)(3)(iii)
(12) 40 CFR 60.253 (b)
(13) 40 CFR 60.254 (b) and (c)
(14) 40 CFR 60.255 (b) through (f) and (h)
(15) 40 CFR 60.257 (a), (b)(1) through (b)(5)
(16) **40 CFR 60.258 (a)(1) through (6), (b)(3), (c), and (d)**

Modification No. 10:

New Section H.3- Facility Operation Conditions - NSPS, SUBPART IIII has been added to incorporate the requirements of 40 CFR Part 60, Subpart IIII applicable to the proposed diesel-fired emergency generators, natural gas-fired emergency generators, and diesel-fired stationary fire pumps.

Section H.3 has been added as follows:

SECTION H.3 FACILITY OPERATION CONDITIONS - NSPS, SUBPART IIII

Facility Description [326 IAC 2-7-5(15)]: Note: Complete Descriptions are shown in Section A.2.

CASP A

(r) Two (2) diesel-fired emergency generators, identified as EGA1 and EGA2, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE.

(s) One (1) natural gas-fired emergency generator, identified as EGA3, , with a maximum rated output of 450 kW. Under 40 CFR 60, Subpart IIII, this is considered an emergency stationary CI ICE.

CASP B

(r) Two (2) diesel-fired emergency generators, identified as EGB1 and EGB2, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE.

(s) One (1) natural gas-fired emergency generator, identified as EGB3, , with a maximum rated output of 450 kW. Under 40 CFR 60, Subpart IIII, this is considered an emergency stationary CI ICE.

CASP C

(r) Two (2) diesel-fired emergency generators, identified as EGC1 and EGC2, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE.

(s) One (1) natural gas-fired emergency generator, identified as EGC3, , with a maximum rated output of 450 kW. Under 40 CFR 60, Subpart IIII, this is considered an emergency stationary CI ICE.

CASP D

(r) Two (2) diesel-fired emergency generators, identified as EGD1 and EGD2, each with a maximum rated output of 1650 kW. Under 40 CFR 60, Subpart IIII, these are each considered an emergency stationary CI ICE.

(s) One (1) natural gas-fired emergency generator, identified as EGD3, , with a maximum rated output of 450 kW. Under 40 CFR 60, Subpart IIII, this is considered an emergency stationary CI ICE.

Insignificant Activities

CASP A

(4) One (1) diesel-fired stationary fire pump, identified as FPA, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 60, Subpart IIII, this is considered a fire pump stationary CI ICE.

CASP B

(4) One (1) diesel-fired stationary fire pump, identified as FPA, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 60, Subpart IIII, this is considered a fire pump stationary CI ICE.

CASP C

(4) One (1) diesel-fired stationary fire pump, identified as FPA, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 60, Subpart IIII, this is considered a fire pump stationary CI ICE.

CASP D

(4) One (1) diesel-fired stationary fire pump, identified as FPA, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 60, Subpart IIII, this is considered a fire pump stationary CI ICE.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

H.3.1 General Provisions Relating to New Source Performance Standards [40 CFR Part 60, Subpart A] [326 IAC 12-1]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR Part 60, Subpart IIII.

(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue

MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

H.3.2 Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR Part 60, Subpart IIII] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart IIII, the Permittee shall comply with the provisions of the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (included as Attachment D of this permit), which are incorporated by reference as 326 IAC 12, as specified as follows:

(18) 40 CFR 60.4200 (a)(2)
(19) 40 CFR 60.4205 (b), (c), and (d)
(20) 40 CFR 60.4206
(21) 40 CFR 60.4207 (a) and (b)
(22) 40 CFR 60.4208
(23) 40 CFR 60.4209
(24) 40 CFR 60.4211 (a), (c), (d)(1), (d)(2), and (e)
(25) 40 CFR 60.4213
(26) 40 CFR 60.4214 (b) and (c)
(27) 40 CFR 60.4217
(28) 40 CFR 60.4218
(29) 40 CFR 60.4219
(30) Table 3 to Subpart IIII of Part 60 (as applicable)
(31) Table 4 to Subpart IIII of Part 60 (as applicable)
(32) Table 5 to Subpart IIII of Part 60 (as applicable)
(33) Table 7 to Subpart IIII of Part 60 (as applicable)
(34) **Table 8 to Subpart IIII of Part 60 (as applicable)**

Modification No. 11:

New Section H.4- Facility Operation Conditions - NESHAP, SUBPART ZZZZ has been added to incorporate the requirements of 40 CFR Part 63, Subpart ZZZZ applicable to the proposed diesel-fired emergency generators, natural gas-fired emergency generators, and diesel-fired stationary fire pumps.

Section H.4 has been added as follows:

SECTION H.4 FACILITY OPERATION CONDITIONS - NESHAP, SUBPART ZZZZ

Facility Description [326 IAC 2-7-5(15)]: Note: Complete Descriptions are shown in Section A.2.

CASP A

(r) Two (2) diesel-fired emergency generators, identified as EGA1 and EGA2, each with a maximum rated output of 1650 kW. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(s) One (1) natural gas-fired emergency generator, identified as EGA3, , with a maximum rated output of 450 kW. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

CASP B

(r) Two (2) diesel-fired emergency generators, identified as EGB1 and EGB2, each with a maximum rated output of 1650 kW. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(s) One (1) natural gas-fired emergency generator, identified as EGB3, , with a maximum rated output of 450 kW. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

CASP C

(r) Two (2) diesel-fired emergency generators, identified as EGC1 and EGC2, each with a maximum rated output of 1650 kW. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(s) One (1) natural gas-fired emergency generator, identified as EGC3, , with a maximum rated output of 450 kW. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

CASP D

(r) Two (2) diesel-fired emergency generators, identified as EGD1 and EGD2, each with a maximum rated output of 1650 kW. Under 40 CFR 63, Subpart ZZZZ, these are each considered a new emergency stationary RICE.

(s) One (1) natural gas-fired emergency generator, identified as EGD3, , with a maximum rated output of 450 kW. Under 40 CFR 63, Subpart ZZZZ, this is considered a new emergency stationary RICE.

Insignificant Activities

CASP A

(4) One (1) diesel-fired stationary fire pump, identified as FPA, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

CASP B

(4) One (1) diesel-fired stationary fire pump, identified as FPA, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

CASP C

(4) One (1) diesel-fired stationary fire pump, identified as FPA, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

CASP D

(4) One (1) diesel-fired stationary fire pump, identified as FPA, approved for construction in 2010, with a maximum rated output of 315 Hp. Under 40 CFR 63, Subpart ZZZZ, this is considered an emergency stationary RICE.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

H.4.1 National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [40 CFR 63, Subpart ZZZZ] [326 IAC 20-82]

Pursuant to 40 CFR 63, Subpart 63, the Permittee shall comply with the provisions of the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (included as Attachment E of this permit), which are incorporated by reference as 326 IAC 20-82, as specified as follows:

(5) 40 CFR 63.6580
(6) 40 CFR 63.6585 (a) and (b)
(7) 40 CFR 63.6590 (a)(2)(i), (a)(2)(ii), (b)(1), and (c)
(8) **40 CFR 63.6645(h)**

Modification No. 12:

To document the compliance status with 326 IAC 6.8-10-3 (Lake County Fugitive Particulate Matter Control Requirements) and material throughput limitations contained in proposed Condition D.20.1, Part 70 Quarterly Reporting Forms have been added to the permit.

The following forms have been added:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name:	**U.S. Steel - Gary Works**
Source Address:	**One North Broadway, Gary, IN 46402**
Mailing Address:	**One North Broadway, Gary, IN 46402**
Part 70 Permit No.:	**T089-7663-00121**
Parameter:	**Coal input**
Limit:	**The input of coal to each of the following facilities shall be less than 750,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month:**

- **HS1 intermediate storage pile #1**
- **phase 1 coal piles (4 piles)**
- **CASP C/D hopper feeder & conveyor (PHS1-HC1)**
- **PHS1 intermediate storage pile #2.**

FACILITY:_____ QUARTER: _____ YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ **No deviation occurred in this quarter.**

☐ **Deviation/s occurred in this quarter.**
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Parameter: Coal input
Limit: The input of coal to each of the following facilities shall be less than 375,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month:

CASP A - feed hopper (CASPA-FH1), CASP A Conv. #1 (CASPA-C1), CASP A Conv. #2 (CASPA-C2), CASP A coal feed hopper (CASPA-FH2), CASP B - feed hopper (CASPB-FH1), CASP B Conv. #1 (CASPB-C1), CASP B Conv. #2 (CASPB-C2), CASP B coal feed hopper (CASPB-FH2), CASP C coal feed hopper No.2 (CASPC-FH2), CASP D coal feed hopper No.2 (CASPD-FH2), CASP C coal feed conveyor (PHS1C-C1), CASP C coal feed conveyor (PHS1C-C2), CASP D coal conveyor (PHS1D-C1), CASP D coal conveyor (PHS1D-C2), CASP C - coal feed hopper No.1 (CASPC-FH1), CASP C coal conveyor (CASPC-C1), CASP C coal conveyor (CASPC-C2), CASP D - coal feed hopper No.1 (CASPD-FH1), CASP D coal conveyor (CASPD-C1), CASP D coal conveyor (CASPD-C2)

FACILITY:_____ QUARTER: _____ YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ **No deviation occurred in this quarter.**

☐ **Deviation/s occurred in this quarter.**
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name:	**U.S. Steel - Gary Works**
Source Address:	**One North Broadway, Gary, IN 46402**
Mailing Address:	**One North Broadway, Gary, IN 46402**
Part 70 Permit No.:	**T089-7663-00121**
Parameter:	**Coal input**
Limit:	**The amount of coal handled by the Phase 1 CASP C/D Coal Feed Path facilities (PHS1 intermediate storage pile #1, phase 1 coal piles, PHS1-HC1, PHS1 intermediate storage pile #2) and the Phase 2 CASP A/B/C/D Coal Feed Path facilities (CASP-C1, CASP-C2, CASP-RS1, and CASP coal storage piles) shall be less than 1,500,000 tons per twelve consecutive month period with compliance determined at the end of each month.**

FACILITY:_____ QUARTER: _____ YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ **No deviation occurred in this quarter.**

☐ **Deviation/s occurred in this quarter.**
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Parameter: Coal input
Limit: The amount of coal handled by the Phase 1 CASP C Coal Feed Path facilities (PHS1C-C1 and PHS1C-C2) and the Phase 2 CASP C Coal Feed Path facilities (CASPC-FH1, CASPC-C1, and CASPC-C2) shall be less than 375,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

FACILITY:_____ QUARTER: _____ YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ **No deviation occurred in this quarter.**

☐ **Deviation/s occurred in this quarter.**
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Parameter: Coal input
Limit: The amount of coal handled by the Phase 1 CASP D Coal Feed Path facilities (PHS1D-C1 and PHS1D-C2)and the Phase 2 CASP D Coal Feed Path facilities (CASPD-FH1, CASPD-C1, and CASPD-C2) shall be less than 375,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

FACILITY:_____ QUARTER: _____ YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ **No deviation occurred in this quarter.**

☐ **Deviation/s occurred in this quarter.**
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Parameter: Billets and Billet Fines input
Limit: The input of billets and billet fines to each of the following facilities shall be less than 50,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month:

CASP A billet fines hopper (OR-A-06-HP1125), CASP A billet fine conveyor (OR-A-06-CB1130), CASP A billet fine conveyor (OR-A-06-CB1140), CASP A billet fine conveyor (OR-A-06-CB1145), CASP B billet fines hopper (OR-B-06-HP1125), CASP B billet fine conveyor (OR-B-06-CB1130), CASP B billet fine conveyor (OR-B-06-CB1140), CASP B billet fine conveyor (OR-B-06-CB1145), CASP C billet fines hopper (OR-C-06-HP1125), CASP C billet fine conveyor (OR-C-06-CB1130), CASP C billet fine conveyor (OR-C-06-CB1140), CASP C billet fine conveyor (OR-C-06-CB1145), CASP D billet fines hopper (OR-D-06-HP1125), CASP D billet fine conveyor (OR-D-06-CB1130), CASP D billet fine conveyor (OR-D-06-CB1140), CASP D billet fine conveyor (OR-D-06-CB1145)

FACILITY:_____ **QUARTER:** _____ **YEAR:** _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ **No deviation occurred in this quarter.**

☐ **Deviation/s occurred in this quarter.**
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Parameter: Billets and Billet Fines input
Limit: The input of billets and billet fines to each of the following facilities shall be less than 375,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month:

CASP A billet drag conveyer (OR-A-06-CD1110), CASP A billet hopper (OR-A-06-HP1115), CASP A billet hopper (OR-A-06-HP1135), CASP A billet drag conveyor (OR-A-06-CD1150), CASP A billet drag conveyor (OR-A-06-CD1160), CASP A billet drag conveyor (OR-A-06-CD1170), CASP A billet drag conveyor (OR-A-06-CD1180), CASP A billet drag conveyor (OR-A-06-CD1190), CASP B billet drag conveyer (OR-B-06-CD1110), CASP B billet hopper (OR-B-06-HP1115), CASP B billet hopper (OR-B-06-HP1135), CASP B billet drag conveyor (OR-B-06-CD1150), CASP B billet drag conveyor (OR-B-06-CD1160), CASP B billet drag conveyor (OR-B-06-CD1170), CASP B billet drag conveyor (OR-B-06-CD1180), CASP B billet drag conveyor (OR-B-06-CD1190), CASP C billet drag conveyer (OR-C-06-CD1110), CASP C billet hopper (OR-C-06-HP1115), CASP C billet hopper (OR-C-06-HP1135), CASP C billet drag conveyor (OR-C-06-CD1150), CASP A billet drag conveyor (OR-C-06-CD1160), CASP C billet drag conveyor (OR-C-06-CD1170), CASP C billet drag conveyor (OR-C-06-CD1180), CASP C billet drag conveyor (OR-C-06-CD1190), CASP D billet drag conveyer (OR-D-06-CD1110), CASP D billet hopper (OR-DA-06-HP1115), CASP D billet hopper (OR-D-06-HP1135), CASP D billet drag conveyor (OR-D-06-CD1150), CASP D billet drag conveyor (OR-D-06-CD1160), CASP D billet drag conveyor (OR-D-06-CD1170), CASP D billet drag conveyor (OR-D-06-CD1180), CASP D billet drag conveyor (OR-D-06-CD1190)

FACILITY:_____ **QUARTER:** _____ **YEAR:** _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ **No deviation occurred in this quarter.**

☐ **Deviation/s occurred in this quarter.**
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Parameter: Billets and Billet Fines input
Limit: The input of billets and billet fines to each of the following combinations of facilities shall be less than 375,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month:

CASP A billet belt conveyors OR-A-06-CB1120 and OR-A-06-CB1126, CASP A billet belt conveyors OR-A-06-CB2120 and OR-A-06-CB2126, CASP A billet vibratory feeders OR-A-06-VF1125 and OR-A-06-VF2126, CASP A trolley loading pans (collectively identified as OR-A-09-LD-1128), CASP A trolley cars (collectively identified as OR-A-09-LD-1128), CASP B billet belt conveyors OR-B-06-CB1120 and OR-B-06-CB1126, CASP B billet belt conveyors OR-B-06-CB2120 and OR-B-06-CB2126, CASP B billet vibratory feeders OR-B-06-VF1125 and OR-A-06-VF2126, CASP B trolley loading pans (collectively identified as OR-B-09-LD-1128), CASP B trolley cars (collectively identified as OR-A-09-LD-1128), CASP C billet belt conveyors OR-C-06-CB1120 and OR-C-06-CB1126, CASP A billet belt conveyors OR-C-06-CB2120 and OR-C-06-CB2126, CASP C billet vibratory feeders OR-C-06-VF1125 and OR-C-06-VF2126, CASP C trolley loading pans (collectively identified as OR-C-09-LD-1128), CASP C trolley cars (collectively identified as OR-C-09-LD-1128), CASP D billet belt conveyors OR-D-06-CB1120 and OR-D-06-CB1126, CASP D billet belt conveyors OR-D-06-CB2120 and OR-D-06-CB2126, CASP D billet vibratory feeders OR-D-06-VF1125 and OR-D-06-VF2126, CASP D trolley loading pans (collectively identified as OR-D-09-LD-1128), CASP D trolley cars (collectively identified as OR-D-09-LD-1128)

FACILITY:_____ **QUARTER:** _____ **YEAR:** _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ **No deviation occurred in this quarter.**

☐ **Deviation/s occurred in this quarter.**
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Parameter: Cokonyx input
Limit: The input of Cokonyx to each of the following combinations of facilities shall be less than 300,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month:

**CASP A Cokonyx belt conveyors OR-A-08-CB1020 and OR-A-08-CB1030, CASP A Cokonyx belt conveyors OR-A-08-CB2020 and OR-A-08-CB2030,
CASP B Cokonyx belt conveyors OR-B-08-CB1020 and OR-B-08-CB1030, CASP B Cokonyx belt conveyors OR-B-08-CB2020 and OR-B-08-CB2030, CASP C Cokonyx belt conveyors OR-C-08-CB1020 and OR-C-08-CB1030, CASP C Cokonyx belt conveyors OR-C-08-CB2020 and OR-C-08-CB2030, CASP D Cokonyx belt conveyors OR-D-08-CB1020 and OR-D-08-CB1030, CASP D Cokonyx belt conveyors OR-D-08-CB2020 and OR-D-08-CB2030, CASP A vibratory feeders CASPA-VF1 and CASPA-VF2, CASP A emergency bypass bunkers CASPA-EB1 and CASPA-EB2, CASP A Cokonyx conveyors CKNXC-A1 and CKNXC-A2, CASP B vibratory feeders CASPB-VF1 and CASPB-VF2, CASP B emergency bypass bunkers CASPB-EB1 and CASPB-EB2, CASP B Cokonyx conveyors CKNXC-B1 and CKNXC-B2, CASP C vibratory feeders CASPC-VF1 and CASPC-VF2, CASP C emergency bypass bunkers CASPC-EB1 and CASPC-EB2, CASP C Cokonyx conveyors CKNXC-C1 and CKNXC-C2, CASP D vibratory feeders CASPD-VF1 and CASPD-VF2, CASP D emergency bypass bunkers CASPD-EB1 and CASPD-EB2, CASP D Cokonyx conveyors CKNXC-D1 and CKNXC-D2**

FACILITY:_____ **QUARTER:** _____ **YEAR:** _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ **No deviation occurred in this quarter.**

☐ **Deviation/s occurred in this quarter.**
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Parameter: Cokonyx input
Limit: The input of Cokonyx to each of the following facilities shall be less than 600,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month:

CASP A/B Emergency Storage Pile, CASP A & B - Cokonyx conveyor (CKNXC-A/B), CASP A & B - Cokonyx storage bins (CKNXBin-A/B), CASP C/D Emergency Storage Pile, CASP C & D - Cokonyx conveyor (CKNXC-C/D), CASP C & D- Cokonyx storage bins (CKNXBin-C/D)

FACILITY:_____ QUARTER: _____ YEAR: _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ **No deviation occurred in this quarter.**

☐ **Deviation/s occurred in this quarter.**
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: U.S. Steel - Gary Works
Source Address: One North Broadway, Gary, IN 46402
Mailing Address: One North Broadway, Gary, IN 46402
Part 70 Permit No.: T089-7663-00121
Parameter: Cokonyx input
Limit: The input of Cokonyx to the Cokonyx loadout railcar shall be less than 1,200,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month:

FACILITY:_____ **QUARTER:** _____ **YEAR:** _____

Month	Material Input (tons)	Material Input (tons)	Material Input (tons)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ **No deviation occurred in this quarter.**

☐ **Deviation/s occurred in this quarter.**
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 089-28848-00121 and Significant Permit Modification No. 089-29236-00121. The staff recommend to the Commissioner that this Part 70 Significant Source and Significant Permit Modification be approved.

Appendix A: Emissions Calculations
Summary of CASP Project Emissions
(page 1 of 2)

Company Name: **U.S. Steel - Gary Works**
Company Address: **One North Broadway, Gary, Indiana 46402**
Significant Source Modification No.: **089-28848-00121**
Significant Permit Modification No.: **089-29236-00121**
Reviewer: **Jenny Acker**
Date: **March 15, 2010**

1. Summary of Emissions Associated with CASP Project

Emissions per CASP Module	CO (tpy)	NOx (tpy)	PM (tpy)	PM10 (tpy)	PM2.5 (tpy)	SO2 (tpy)	VOC (tpy)	HAPs (tpy)
FER (Total of 4)	1.93E-06	14.02	7.01	7.01	7.01	1.75	4.38	4.38
PFR (Total of 2)	8.06E-05	28.03	27.16	27.16	27.16	66.58	2.19	2.19
Generators & Fire Pump	7.13	26.86	0.83	0.48	0.48	0.47	0.75	1.36E-02
Dust Collectors	--	--	17.20	17.20	17.20	--	--	--
Cooling Towers	--	--	6.86	6.86	6.86	--	neg	neg
Coal Tar Tanks	--	--	--	--	--	--	5.00	5.00
Diesel Fuel Tanks	--	--	--	--	--	--	1.00	1.00
Total per CASP:	7.13	68.91	59.06	58.71	58.71	68.80	13.32	12.58
Phase 1 - CASP C & D Material Handling Emissions								
Material Transfer	--	--	32.17	15.22	2.30	--	--	--
Storage Piles	--	--	4.56	2.28	0.34	--	--	--
Road Emissions	--	--	37.65	10.03	1.00	--	--	--
Totals:	--	--	74.38	27.53	3.65	--	--	--
Increased Utilization								
Pulverizer Building	0.37	1.61	1.81	1.81	1.81	6.75	0.03	neg
Coal Handling Processes	0.00	0.00	7.01	4.20	4.20	0.00	0.00	0.00
Totals:	0.37	1.61	8.81	6.01	6.01	6.75	0.03	0.00
Contemporaneous Emissions (Prior)	106.61	37.74	34.42	24.51	23.10	9.52	8.59	neg.
Phase 1 - Units Shutdown Prior to Start of Project.								
#3 COB (shutdown)	263.32	501.06	288.20	244.64	244.64	149.52	148.95	
#3 Coke Battery Pre-Carb Facility (shutdown)	2554.96	32.18	75.45	73.56	73.56	4.73	374.25	
Phase 2 - Emissions Increase from Phase 1 (includes throughput increases & new emission points):								
Material Transfer	--	--	51.02	26.62	3.65	--	--	--
Storage Piles	--	--	3.98	6.29	0.94	--	--	--
Road Emissions	--	--	17.46	4.65	0.47	--	--	--
Totals - Phase 2 New Emissions:	--	--	72.47	37.56	5.06	--	--	--
Phase 2 - Units Shutdown as Part of the Project.								
#5 COB	161.02	329.25	124.94	134.72	134.72	107.73	98.06	
#7 COB	168.87	345.31	122.72	107.83	107.83	66.23	102.84	
#5 / #6 Coke Quench Towers	0.00	0.00	28.06	6.42	6.42	0.00	1.36	

2. Phase 1 of CASP Project Netting Analysis

	CO (tpy)	NOx (tpy)	PM (tpy)	PM10 (tpy)	PM2.5 (tpy)	SO2 (tpy)	VOC (tpy)	HAPs (tpy)
CASP C & D	14.27	137.82	118.12	117.42	117.42	137.60	26.64	25.17
Phase I Material Handling Emissions	--	--	74.38	27.53	3.65	--	--	--
Increased Utilization	0.37	1.61	8.81	6.01	6.01	6.75	0.03	0.00
Phase 1 PTE	**14.64**	**139.43**	**201.31**	**150.96**	**127.08**	**144.34**	**26.66**	**25.17**
Contemporaneous Emissions Increases	106.61	37.74	34.42	24.51	23.10	9.52	8.59	neg.
#3 COB Pre-Carb Credits	2554.96	32.18	75.45	73.56	73.56	4.73	374.25	0.00
Phase 1 - Emissions Increase Prior to #3 COB Credits	*-2433.71*	*145.00*	*160.29*	*101.91*	*76.62*	*149.13*	*-338.99*	*25.17*
#3 Coke Oven Credits	263.32	501.06	288.20	244.64	244.64	149.52	148.95	0.00
Phase 1 - Net Emissions Increase (NEI):	**-2697.03**	**-356.06**	**-127.91**	**-142.73**	**-168.02**	**-0.38**	**-487.94**	**25.17**
Significant Thresholds:	100	40	25	15	10	40	25	n/a

Appendix A: Emissions Calculations
Summary of CASP Project Emissions
(page 2 of 2)

3. Phase 2 of CASP Project Netting Analysis

3.a) Startup of 3rd CASP	CO (tpy)	NOx (tpy)	PM (tpy)	PM10 (tpy)	PM2.5 (tpy)	SO2 (tpy)	VOC (tpy)	HAPs (tpy)
Phase 1 - Net Emissions Increase (NEI)	-2697.03	-356.06	-127.91	-142.73	-168.02	-0.38	-487.94	25.17
Emissions from Startup of 3rd CASP (A or B)	7.13	68.91	59.06	58.71	58.71	68.80	13.32	12.58
Phase 2 Material Handling Emissions Increase from Phase 1	--	--	72.47	37.56	5.06	--	--	--
No. 5 COB Baseline	161.02	329.25	*124.94*	*134.72*	*134.72*	*107.73*	98.06	0.00
No. 7 COB Baseline	*168.87*	*345.31*	122.72	107.83	107.83	66.23	*102.84*	0.00
Net Emissions Increase after 3rd CASP: [1)]	**-2850.92**	**-616.39**	**-119.10**	**-154.29**	**-212.08**	**2.19**	**-572.68**	**37.75**
Emissions from Startup of 4th CASP (A or B)	7.13	68.91	59.06	58.71	58.71	68.80	13.32	12.58
Remaining Baseline Credits (No.5 or No. 7 COB)	168.87	345.31	124.94	134.72	134.72	107.73	102.84	0.00
#5 / #6 Coke Quench Towers Shutdown	0.00	0.00	28.06	6.42	6.42	0.00	1.36	--
Net Emissions Increase after 4th CASP:	**-3012.66**	**-892.79**	**-213.03**	**-236.71**	**-294.50**	**-36.74**	**-663.55**	**50.33**

[1)] U.S. Steel - Gary Works has the option to shut down either #5 COB or #7 COB within 180 days after startup of the third CASP Module. Therefore, the lowest creditable emissions were used to calculate the NEI after the third CASP. The remaining emissions are used to calculate the NEI after the startup of the fourth CASP and the completion of the project.

Appendix A: Emissions Calculations
Feed Enhancement Reactors (FER) & Process Fusion Reactors (PFR) Emissions

Company Name: U.S. Steel - Gary Works
Company Address: One North Broadway, Gary, Indiana 46402
Significant Source Modification No.: 089-28848-00121
Significant Permit Modification No.: 089-29236-00121
Reviewer: Jenny Acker
Date: March 15, 2010

1. FER Emissions

Per FER	Units	CO	NOx	PM/PM10/PM2.5	SO2	VOC	HAPs*
Uncontrolled Emissions	(lb/hr)	1.10E-07	0.80	40.00	2.20	unknown	unknown
Uncontrolled Emissions	(tpy)	4.82E-07	3.50	175.20	9.64	unknown	unknown
Controlled Emissions	(lb/hr)	1.10E-07	0.80	0.40	0.10	0.25	0.25
Controlled Emissions	(tpy)	4.82E-07	3.50	1.75	0.44	1.095	1.095
Uncontrolled Emissions per CASP (tpy)		1.93E-06	14.02	700.80	38.54	n/a	n/a
Controlled Emissions per CASP (tpy)		1.93E-06	14.02	7.01	1.75	4.38	4.38

2. PFR Emissions

Per PFR	Units	CO	NOx	PM/PM10/PM2.5	SO2	VOC	HAPs*
Uncontrolled Emissions	(lb/hr)	9.20E-06	3.20	310.00	151.60	unknown	unknown
Uncontrolled Emissions	(tpy)	4.03E-05	14.02	1357.80	664.01	unknown	unknown
Controlled Emissions	(lb/hr)	9.20E-06	3.20	3.10	7.60	0.25	0.25
Controlled Emissions	(tpy)	4.03E-05	14.02	13.58	33.29	1.095	1.095
Uncontrolled Emissions per CASP (tpy)		8.06E-05	28.03	2715.60	1328.02	n/a	n/a
Controlled Emissions per CASP (tpy)		8.06E-05	28.03	27.16	66.58	2.19	2.19

* Conservative Assumption that all VOCs are HAPs
Uncontrolled VOC/HAP numbers are not known

Appendix A: Emissions Calculations
Unpaved Roads Emissions

Company Name: U.S. Steel - Gary Works
Company Address: One North Broadway, Gary, Indiana 46402
Significant Source Modification No.: 089-28848-00121
Significant Permit Modification No.: 089-29236-00121
Reviewer: Jenny Acker
Date: March 15, 2010

1. Unpaved Roads Specifications Reference: AP-42, 5th Edition, Section 13.2.2

$$E = k * (s/12)^a * (W/3)^{b*} [(365 - P)/365] * (1-CE\%/100)$$

where:	E=		emission factor (lb/vehicle mile traveled)
	k =	4.9	PM (particle size multiplier) (lb/VMT)
		1.5	PM10 (particle size multiplier) (lb/VMT)
		0.15	PM2.5 (particle size multiplier) (lb/VMT)
	sL =	6.0	silt loading (g/m$^{2)}$
	w =	see formula	average weight of vehicles (tons)
	a =	0.7	PM (empirical constant)
		0.9	PM10/PM2.5 (empirical constant)
	b =	0.45	PM/PM10/PM2.5 (empirical constant)
	p =	124	number of days per year with 0.01 inches precipitation
	CE =	50	% Control Efficiency

Fugitive dust control will be achieved through the application of chemical suppressants.
Application of chemical suppressant will be sufficient to achieve and maintain ground inventory of 0.15 gal/yd ^{2}
Source Air Pollution Control Manual, 1992, Air Waste & Management Assoc. pg 144.

2. Unpaved Roads Emissions

Coal input per CASP = 375,000 tons per year
Cokonyx output per CASP = 300,000 tons per year

	Source Description	Vehicle Specifications		Vehicle Weight (tons)		Material Throughput	Number of Trips	Vehicle Miles			Emission Factors			Emissions		
		Type	Fill (yd^3)	Loaded	Unloaded			Feet per Round Trip	Traveled (VMT)/yr	w (tons)	PM (lbs/mile)	PM10 (lbs/mile)	PM2.5 (lbs/mile)	PM (tpy)	PM10 (tpy)	PM2.5 (tpy)
1.	PHS1 interm. Pile 1/PSH1 coal piles	Cat 992D	12.5	116.28	107	750,000	80,820	900.00	13776.14	112	5.07	1.35	0.14	17.460	4.653	0.465
2.	PSH1 coal piles/CASPA-F1	Cat 998F	7.8	59.79	54	750,000	129,519	800.00	19624.13	57	3.74	1.00	0.10	18.365	4.894	0.489
3.	PHS1 interm. Pile 2/PHS1C-C1	Cat 992D	13.3	116.90	107	375,000	37,894	100.00	717.69							
4.	PHS1 interm. Pile 2/PHS1D-C1	Cat 992D	13.3	116.90	107	375,000	37,894	100.00	717.69							
								Fleet Average:	1435.37	112	5.08	1.35	0.14	1.821	0.485	0.049
5.	C/D emergency storage piles/railcar	Cat 992D	12.5	116.28	107	600,000	1	200.00	0.04	112	5.07	1.35	0.14	4.80E-05	1.28E-05	1.28E-06
6.	A/B emergency storage piles/railcar	Cat 992D	12.5	116.28	107	600,000	1	200.00	0.04	112	5.07	1.35	0.14	4.80E-05	1.28E-05	1.28E-06
7.	CASP coal piles/CC-C/D1	Cat 992D	12.5	116.28	107	750,000	80,820	900.00	13776.14	112	5.07	1.35	0.14	1.75E+01	4.65E+00	4.65E-01
8.	CASP coal piles/CC-A/B1	Cat 992D	12.5	116.28	107	750,000	80,820	900.00	13776.14	112	5.07	1.35	0.14	1.75E+01	4.65E+00	4.65E-01
													Phase 1 Emissions (Lines 1 - 5) :	**37.65**	**10.03**	**1.00**

Where: Coal Weight = 0.74 ton/yd3, return trip empty

Emissions after Phase 2 Under Normal Operating Conditions (Lines 5 - 8):	34.92	9.31	0.93
Worst Case emissions after Phase 2 [A/B Emissions + C/D AOS (Alternative Operating Scenario)] (Lines 1 - 5, 6 & 8):	55.11	14.69	1.47
Phase 2 Emissions Increase from Phase 1 (Worst Case after Phase 2 - Phase 1 Emissions):	**17.46**	**4.65**	**0.47**

Appendix A: Emissions Calculations
Material Handling & Storage Pile Emissions
(page 1 of 5)

Company Name: **U.S. Steel - Gary Works**
Company Address: **One North Broadway, Gary, Indiana 46402**
Significant Source Modification No.: **089-28848-00121**
Significant Permit Modification No.: **089-29236-00121**
Reviewer: **Jenny Acker**
Date: **March 15, 2010**

1. Material Information (per CASP)

Material	Moisture Content M (%)	Silt Content s (%)	Thoughput Per CASP (tpy)
Wet Coal	5.00	2.20	375,000
Billets	3.00	1.00	375,000
Billet Fines	3.00	1.00	50,000
Cokonyx	1.00	2.20	300,000

1. Moisture content for coal provided by US Steel. The Cokonyx will have a substantially lower moisture. These properties are assumed to be the same as for coke.
2. Silt content for coal as received by a power plant per AP-42 Table 13.2.4-1.

2. Emission Factor Calculation and Meteorological Information for Chicago, Illinois

U =	10.3	mph	Mean Wind Speed (Based on met data for Chicago, Illinois through 2008)
f =	35.0	%	% of time that unobstructed wind speed > 12 mph (Based on met data for Chicago, Illinois 1985-1990)
p =	120	days	Days of rain (AP-42 Figure 13.2.1-2)

E = k*(0.0032) * ((U/5)^1.3)/((M/2)^1.4)

where E =		Emission factor (lb/ton of material throughput)
k =	0.74	PM (particle size multiplier)
k=	0.35	PM10 (particle size multiplier)
k=	0.053	PM2.5 (particle size multiplier)
U =	10.3	mile/hr mean wind speed (outside)
U =	2.0	mile/hr mean wind speed (inside building)

3. Material Transfer Emissions

Source Description (Receiving Material)	Material Description	Emission Factor (lb/kton)			Throughput (t/yr/pt)		Phase 1 Emissions (tpy)			Phase 2 Emissions (tpy)		
		PM	PM10	PM2.5	Phase 1	Phase 2	PM	PM10	PM2.5	PM	PM10	PM2.5
Raw Material Receiving/Handling												
Phase 1 - coal receiving & handling												
PHS1 inter. pile #1	wet coal	1.68	0.79	0.12	750,000	AOS	0.63	0.30	0.05	0.00	0.00	0.00
PHS1 coal piles	wet coal	1.68	0.79	0.12	750,000	AOS	0.63	0.30	0.05	0.00	0.00	0.00
conv.-hopper (PHS1-HC1)	wet coal	1.68	0.79	0.12	750,000	AOS	0.63	0.30	0.05	0.00	0.00	0.00
PHS1 inter. pile #2	wet coal	1.68	0.79	0.12	750,000	AOS	0.63	0.30	0.05	0.00	0.00	0.00
Phase 1 - CASP C coal handling & input												

CASP C conv. #1 (PHS1C-C1)	wet coal	1.68	0.79	0.12	375,000	AOS	0.31	0.15	0.02	0.00	0.00	0.00
CASP C conv. #2 (PHS1C-C2)	wet coal	1.68	0.79	0.12	375,000	AOS	0.31	0.15	0.02	0.00	0.00	0.00
CASP C coal feed hopper (CASPC-FH2)	wet coal	1.68	0.79	0.12	375,000	375,000	0.31	0.15	0.02	0.31	0.15	0.02
Phase 1 - CASP D coal handling & input			0.79									
CASP D conv. #1 (PHS1D-C1)	wet coal	1.68	0.79	0.12	375,000	AOS	0.31	0.15	0.02	0.00	0.00	0.00
CASP D conv. #2 (PHS1D-C2)	wet coal	1.68	0.79	0.12	375,000	AOS	0.31	0.15	0.02	0.00	0.00	0.00
CASP D coal feed hopper (CASPD-FH2)	wet coal	1.68	0.79	0.12	375,000	375,000	0.31	0.15	0.02	0.31	0.15	0.02
Phase 2 - coal receiving & handling (CASP C & D)												
CASP conv. #1(CASP-C1)	wet coal	1.68	0.79	0.12	0	750,000	0.00	0.00	0.00	0.63	0.30	0.05
CASP conv. #2(CASP-C2)	wet coal	1.68	0.79	0.12	0	750,000	0.00	0.00	0.00	0.63	0.30	0.05
CASP rotary stacker (CASP-RS1)	wet coal	1.68	0.79	0.12	0	750,000	0.00	0.00	0.00	0.63	0.30	0.05
CASP coal piles	wet coal	1.68	0.79	0.12	0	750,000	0.00	0.00	0.00	0.63	0.30	0.05
Phase 2 - CASP C coal handling & input												
CASP C feed hopper (CASPC-FH1)	wet coal	1.68	0.79	0.12	0	375,000	0.00	0.00	0.00	0.31	0.15	0.02
CASP C Conv.#1 (CASPC-C1)	wet coal	1.68	0.79	0.12	0	375,000	0.00	0.00	0.00	0.31	0.15	0.02
CASP C Conv. #2 (CASPC-C2)	wet coal	1.68	0.79	0.12	0	375,000	0.00	0.00	0.00	0.31	0.15	0.02
Phase 2 - CASP D coal handling & input												
CASP D feed hopper (CASPD-FH1)	wet coal	1.68	0.79	0.12	0	375,000	0.00	0.00	0.00	0.31	0.15	0.02
CASP D Conv.#1 (CASPD-C1)	wet coal	1.68	0.79	0.12	0	375,000	0.00	0.00	0.00	0.31	0.15	0.02
CASP D Conv. #2 (CASPD-C2)	wet coal	1.68	0.79	0.12	0	375,000	0.00	0.00	0.00	0.31	0.15	0.02
Phase 1 (CASP C/D) also Phase 2 C/D AOS (alternative operating scenario):							**4.41**	**2.09**	**0.32**			
Phase 2 (CASP C/D):										**5.04**	**2.38**	**0.36**
Phase 2 - coal receiving & handling (CASP A/B)												
CASP conv. #1(CASP-C1)	wet coal	1.68	1.62	0.12	0	750,000	0.00	0.00	0.00	0.63	0.61	0.05
CASP conv. #2(CASP-C2)	wet coal	1.68	1.62	0.12	0	750,000	0.00	0.00	0.00	0.63	0.61	0.05
CASP rotary stacker (CASP-RS1)	wet coal	1.68	1.62	0.12	0	750,000	0.00	0.00	0.00	0.63	0.61	0.05
CASP coal piles	wet coal	1.68	1.62	0.12	0	750,000	0.00	0.00	0.00	0.63	0.61	0.05
Phase 2 - CASP A coal handling & input												
CASP A feed hopper (CASPA-FH1)	wet coal	1.68	1.62	0.12	0	375,000	0.00	0.00	0.00	0.31	0.30	0.02
CASP A Conv.#1 (CASPA-C1)	wet coal	1.68	1.62	0.12	0	375,000	0.00	0.00	0.00	0.31	0.30	0.02
CASP A Conv. #2 (CASPA-C2)	wet coal	1.68	1.62	0.12	0	375,000	0.00	0.00	0.00	0.31	0.30	0.02
CASP A coal feed hopper (CASPA-FH2)	wet coal	1.68	1.62	0.12	0	375,000	0.00	0.00	0.00	0.31	0.30	0.02
Phase 2 - CASP B coal handling & input												
CASP B feed hopper (CASPB-FH1)	wet coal	1.68	1.62	0.12	0	375,000	0.00	0.00	0.00	0.31	0.30	0.02
CASP B Conv.#1 (CASPB-C1)	wet coal	1.68	1.62	0.12	0	375,000	0.00	0.00	0.00	0.31	0.30	0.02
CASP B Conv. #2 (CASPB-C2)	wet coal	1.68	1.62	0.12	0	375,000	0.00	0.00	0.00	0.31	0.30	0.02
CASP B coal feed hopper (CASPB-FH2)	wet coal	1.68	1.62	0.12	0	375,000	0.00	0.00	0.00	0.31	0.30	0.02
								Phase 2 (CASP A/B) :		**5.04**	**4.87**	**0.36**
Billet Transfer Area												
CASP A												
billet fines hopper (OR-A-06-HP1125)	fines	0.41	0.19	0.03	0	50,000	0.00	0.00	0.00	0.01	0.00	0.00
billet fine conv (OR-A-06-CB1130)	fines	0.41	0.19	0.03	0	50,000	0.00	0.00	0.00	0.01	0.00	0.00
billet fine conv (OR-A-06-CB1140)	fines	0.41	0.19	0.03	0	50,000	0.00	0.00	0.00	0.01	0.00	0.00
billet fine conv (OR-A-06-CB1145)	fines	0.41	0.19	0.03	0	50,000	0.00	0.00	0.00	0.01	0.00	0.00
billet conv. (OR-A-06-CD1110)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
billet hopper (OR-A-06-HP1115)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
billet belt convs (OR-A-06-CB1120 or CB1126)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
billet belt convs (OR-A-06-CB2120 or CB2126)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
billet vib. feeders (OR-A-06-VF1125 or VF2126)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
two (2) trolley cars (OR-A-06-LD1128)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
two (2) trolley loading pans (OR-A-06-LD1128)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
billet hopper (OR-A-06-HP1135)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
billet conv (OR-A-06-CD1150)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01

billet conv (OR-A-06-CD1160)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
billet conv (OR-A-06-CD1170)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
billet conv (OR-A-06-CD1180)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
billet conv (OR-A-06-CD1190)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
CASP B												
billet fines hopper (OR-B-06-HP1125)	billets	0.41	0.19	0.03	0	50,000	0.00	0.00	0.00	0.01	0.00	0.00
billet fine conv (OR-B-06-CB1130)	billets	0.41	0.19	0.03	0	50,000	0.00	0.00	0.00	0.01	0.00	0.00
billet fine conv (OR-B-06-CB1140)	billets	0.41	0.19	0.03	0	50,000	0.00	0.00	0.00	0.01	0.00	0.00
billet fine conv (OR-B-06-CB1145)	billets	0.41	0.19	0.03	0	50,000	0.00	0.00	0.00	0.01	0.00	0.00
billet conv. (OR-B-06-CD1110)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
billet hopper (OR-B-06-HP1115)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
billet belt convs (OR-B-06-CB1120 or CB1126)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
billet belt convs (OR-B-06-CB2120 or CB2126)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
billet vib. feeders (OR-B-06-VF1125 or VF2126)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
two (2) trolley cars (OR-B-06-LD1128)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
two (2) trolley loading pans (OR-B-06-LD1128)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
billet hopper (OR-B-06-HP1135)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
billet conv (OR-B-06-CD1150)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
billet conv (OR-B-06-CD1160)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
billet conv (OR-B-06-CD1170)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
billet conv (OR-B-06-CD1180)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
billet conv (OR-B-06-CD1190)	billets	0.41	0.19	0.03	0	375,000	0.00	0.00	0.00	0.08	0.04	0.01
CASP C												
billet fines hopper (OR-C-06-HP1125)	billets	0.41	0.19	0.03	50,000	50,000	0.01	0.00	0.00	0.01	0.00	0.00
billet fine conv (OR-C-06-CB1130)	billets	0.41	0.19	0.03	50,000	50,000	0.01	0.00	0.00	0.01	0.00	0.00
billet fine conv (OR-C-06-CB1140)	billets	0.41	0.19	0.03	50,000	50,000	0.01	0.00	0.00	0.01	0.00	0.00
billet fine conv (OR-C-06-CB1145)	billets	0.41	0.19	0.03	50,000	50,000	0.01	0.00	0.00	0.01	0.00	0.00
billet conv. (OR-C-06-CD1110)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
billet hopper (OR-C-06-HP1115)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
billet belt convs (OR-C-06-CB1120 or CB1126)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
billet belt convs (OR-C-06-CB2120 or CB2126)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
billet vib. feeders (OR-C-06-VF1125 or VF2126)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
two (2) trolley cars (OR-C-06-LD1128)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
two (2) trolley loading pans (OR-C-06-LD1128)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
billet hopper (OR-C-06-HP1135)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
billet conv (OR-C-06-CD1150)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
billet conv (OR-C-06-CD1160)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
billet conv (OR-C-06-CD1170)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
billet conv (OR-C-06-CD1180)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
billet conv (OR-C-06-CD1190)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
CASP D												
billet fines hopper (OR-D-06-HP1125)	billets	0.41	0.19	0.03	50,000	50,000	0.01	0.00	0.00	0.01	0.00	0.00
billet fine conv (OR-D-06-CB1130)	billets	0.41	0.19	0.03	50,000	50,000	0.01	0.00	0.00	0.01	0.00	0.00
billet fine conv (OR-D-06-CB1140)	billets	0.41	0.19	0.03	50,000	50,000	0.01	0.00	0.00	0.01	0.00	0.00
billet fine conv (OR-D-06-CB1145)	billets	0.41	0.19	0.03	50,000	50,000	0.01	0.00	0.00	0.01	0.00	0.00
billet conv. (OR-D-06-CD1110)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
billet hopper (OR-D-06-HP1115)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
billet belt convs (OR-D-06-CB1120 or CB1126)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
billet belt convs (OR-D-06-CB2120 or CB2126)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
billet vib. feeders (OR-D-06-VF1125 or VF2126)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
two (2) trolley cars (OR-D-06-LD1128)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
two (2) trolley loading pans (OR-D-06-LD1128)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
billet hopper (OR-D-06-HP1135)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01

billet conv (OR-D-06-CD1150)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
billet conv (OR-D-06-CD1160)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
billet conv (OR-D-06-CD1170)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
billet conv (OR-D-06-CD1180)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
billet conv (OR-D-06-CD1190)	billets	0.41	0.19	0.03	375,000	375,000	0.08	0.04	0.01	0.08	0.04	0.01
Finish Product Handling and Loading												
CASP A - FPHLA												
Cokonyx belt convs (OR-A-08-CB1020 or CB1030)	cokonyx	1.90	0.90	0.14	0	300,000	0.00	0.00	0.00	0.28	0.13	0.02
Cokonyx belt convs (OR-A-08-CB2020 or CB2030)	cokonyx	1.90	0.90	0.14	0	300,000	0.00	0.00	0.00	0.28	0.13	0.02
Cokonyx belt conv (OR-A-08-CB1035)	cokonyx	1.90	0.90	0.14	0	300,000	0.00	0.00	0.00	0.28	0.13	0.02
CASP B - FPHLB												
Cokonyx belt convs (OR-B-08-CB1020 or CB1030)	cokonyx	1.90	0.90	0.14	0	300,000	0.00	0.00	0.00	0.28	0.13	0.02
Cokonyx belt convs (OR-B-08-CB2020 or CB2030)	cokonyx	1.90	0.90	0.14	0	300,000	0.00	0.00	0.00	0.28	0.13	0.02
Cokonyx belt conv (OR-B-08-CB1035)	cokonyx	1.90	0.90	0.14	0	300,000	0.00	0.00	0.00	0.28	0.13	0.02
CASP C - FPHLC												
Cokonyx belt convs (OR-C-08-CB1020 or CB1030)	cokonyx	1.90	0.90	0.14	300,000	300,000	0.28	0.13	0.02	0.28	0.13	0.02
Cokonyx belt convs (OR-C-08-CB2020 or CB2030)	cokonyx	1.90	0.90	0.14	300,000	300,000	0.28	0.13	0.02	0.28	0.13	0.02
Cokonyx belt conv (OR-C-08-CB1035)	cokonyx	1.90	0.90	0.14	300,000	300,000	0.28	0.13	0.02	0.28	0.13	0.02
CASP D - FPHLD												
Cokonyx belt convs (OR-D-08-CB1020 or CB1030)	cokonyx	1.90	0.90	0.14	300,000	300,000	0.28	0.13	0.02	0.28	0.13	0.02
Cokonyx belt convs (OR-D-08-CB2020 or CB2030)	cokonyx	1.90	0.90	0.14	300,000	300,000	0.28	0.13	0.02	0.28	0.13	0.02
Cokonyx belt conv (OR-D-08-CB1035)	cokonyx	1.90	0.90	0.14	300,000	300,000	0.28	0.13	0.02	0.28	0.13	0.02
Cokonyx Loadout												
two (2) vibratory screener feeders for CASP A	cokonyx	15.99	7.56	1.15	0	300,000	0.00	0.00	0.00	2.40	1.13	0.17
two (2) vibratory screener feeders for CASP B	cokonyx	15.99	7.56	1.15	0	300,000	0.00	0.00	0.00	2.40	1.13	0.17
two (2) vibratory screener feeders for CASP C	cokonyx	15.99	7.56	1.15	300,000	300,000	2.40	1.13	0.17	2.40	1.13	0.17
two (2) vibratory screener feeders for CASP D	cokonyx	15.99	7.56	1.15	300,000	300,000	2.40	1.13	0.17	2.40	1.13	0.17
two (2) emergency by-pass bunkers for CASP A	cokonyx	15.99	7.56	1.15	0	300,000	0.00	0.00	0.00	2.40	1.13	0.17
two (2) emergency by-pass bunkers for CASP B	cokonyx	15.99	7.56	1.15	0	300,000	0.00	0.00	0.00	2.40	1.13	0.17
A/B Cokonyx Emergency Storage Pile	cokonyx	15.99	7.56	1.15	0	500,000	0.00	0.00	0.00	4.00	1.89	0.29
two (2) emergency by-pass bunkers for CASP C	cokonyx	15.99	7.56	1.15	300,000	300,000	2.40	1.13	0.17	2.40	1.13	0.17
two (2) emergency by-pass bunkers for CASP D	cokonyx	15.99	7.56	1.15	300,000	300,000	2.40	1.13	0.17	2.40	1.13	0.17
C/D Cokonyx Emergency Storage Pile	cokonyx	15.99	7.56	1.15	0	500,000	0.00	0.00	0.00	4.00	1.89	0.29
CKNXC-A1 or CKNXC-A2	cokonyx	15.99	7.56	1.15	0	300,000	0.00	0.00	0.00	2.40	1.13	0.17
CKNXC-B1 or CKNXC-B2	cokonyx	15.99	7.56	1.15	0	300,000	0.00	0.00	0.00	2.40	1.13	0.17
CKNXC-C1 or CKNXC-C2	cokonyx	15.99	7.56	1.15	300,000	300,000	2.40	1.13	0.17	2.40	1.13	0.17
CKNXC-D1 or CKNXC-D2	cokonyx	15.99	7.56	1.15	300,000	300,000	2.40	1.13	0.17	2.40	1.13	0.17
CKNXC-A/B	cokonyx	15.99	7.56	1.15	0	600,000	0.00	0.00	0.00	4.80	2.27	0.34
CKNXC-C/D	cokonyx	15.99	7.56	1.15	300,000	600,000	2.40	1.13	0.17	4.80	2.27	0.34
CKNXBin- A/B	cokonyx	15.99	7.56	1.15	0	600,000	0.00	0.00	0.00	4.80	2.27	0.34
CKNXBin- C/D	cokonyx	15.99	7.56	1.15	300,000	600,000	2.40	1.13	0.17	4.80	2.27	0.34
Cokonyx Loadout to Railcar	cokonyx	15.99	7.56	1.15	600,000	1,200,000	4.80	2.27	0.34	9.59	4.54	0.69
						Phase 1 Emissions:	**32.17**	**15.22**	**2.30**			
						Phase 2 Emissions Under Normal Operating Scenario:				**83.20**	**41.84**	**5.96**
						Worst Case Emissions after Phase 2 :				**83.20**	**41.84**	**5.96**
						Phase 2 Emissions (Worst Case) Increases from Phase 1				**51.02**	**26.62**	**3.65**

Appendix A: Emissions Calculations
Material Handling & Storage Pile Emissions
(page 5 of 5)

4. Storage Piles Emissions

	Source Description	Number 0f Piles	Acreage (acres)	Emission Factor (E) (lb/acre/day)			CE (%)	Uncontrolled Emissions (tpy)			PTE (after control) (tpy)		
				PM	PM10	PM2.5		PM	PM10	PM2.5	PM	PM10	PM2.5
1.	PHS1 inter. coal storage pile no. 1	1	0.25	6.07	3.03	0.45	0	0.28	0.14	0.02	2.77E-01	1.38E-01	2.08E-02
2.	PHS1 coal storage piles (1 of 4)	4	0.9	6.07	3.03	0.45	0	3.98	1.99	0.30	3.98E+00	1.99E+00	2.99E-01
3.	PHS1 inter.coal storage pile no. 2	1	0.25	6.07	3.03	0.45	0	0.28	0.14	0.02	2.77E-01	1.38E-01	2.08E-02
4.	CASP coal storage piles (1 of 4)	4	0.9	6.07	3.03	0.45	0	3.98	1.99	0.30	3.98E+00	1.99E+00	2.99E-01
5.	A/B Cokonyx Em. storage pile	1	0.02	6.07	3.03	0.45	0	0.02	0.01	0.00	2.21E-02	1.11E-02	1.66E-03
6.	C/D Cokonyx Em. storage pile	1	0.02	6.07	3.03	0.45	0	0.02	0.01	0.00	2.21E-02	1.11E-02	1.66E-03
										Phase 1 CASP Emissions (Lines 1-3 & 6):	**4.56**	**2.28**	**0.34**
										Emissions after Phase 2 Under Normal Operating Conditions (Lines 4-6):	4.03	2.01	0.30
										Worst Case Emissions after Phase 2 [A/B Emissions + C/D AOS (Alternative Operating Scenario)] Lines 1-4 & 6):	8.55	4.27	0.64
										Phase 2 Emissions Increase from Phase 1 (Worst Case after Phase 2 - Phase 1 Emissions):	**3.98**	**6.29**	**0.94**

Reference: AP-42, Ch 12.3-5 (05/1983), as updated with the addition of the particle size multiplier (k)
Where the inclusion of "k" is referenced by "Control of Open Fugitive Dust Sources, EPA 450/3-88-088 (1988)"

$$E = 1.7 * k * (s/1.5) [(365-p) / 235] (f/15)$$

where:	E =		emission factor (lb/day/acre of stockpile)
	k =	1.00	PM (particle size multiplier)
	k=	0.50	PM10 (particle size multiplier)
	k=	0.075	PM2.5 (particle size multiplier)
	s =	2.20	% silt content (ave)
	p =	120	number of days with >= 0.01 in. of precipitation
	f =	35.0	% of time that unobstructed wind speed exceeds 12 mph at the mean pile height

Appendix A: Emissions Calculations
PM/PM10/PM2.5 Emissions from Dust Collectors

Company Name: U.S. Steel - Gary Works
Company Address: One North Broadway, Gary, Indiana 46402
Significant Source Modification No.: 089-28848-00121
Significant Permit Modification No.: 089-29236-00121
Reviewer: Jenny Acker
Date: March 15, 2010

Collector ID	Emission Units (ID)	Flow Rate (acfm)	Grain Loading (gr/dscf)	Controlled PM/PM10/PM2.5 (lbs/hr)	Controlled PM/PM10/PM2.5 (ton/yr)	Control Eff. (%)	Uncontrolled PM/PM10/PM2.5 (lbs/hr)	Uncontrolled PM/PM10/PM2.5 (ton/yr)
OR-X-01-DC1105	wet coal (RMRHSX)	1,100	0.005	0.05	0.21	99.9%	47	206
OR-X-01-DC2105	wet coal (RMRHSX)	1,100	0.005	0.05	0.21	99.9%	47	206
OR-X-02-DC1070	dry coal bin (RMRHSX)	800	0.005	0.03	0.15	99.9%	34	150
OR-X-02-DC2070	dry coal bin (RMRHSX)	800	0.005	0.03	0.15	99.9%	34	150
OR-X-02-DC3070	dry coal bin (RMRHSX)	800	0.005	0.03	0.15	99.9%	34	150
OR-X-02-DC4070	dry coal bin (RMRHSX)	800	0.005	0.03	0.15	99.9%	34	150
OR-X-02-DC5070	dry coal bin (RMRHSX)	800	0.005	0.03	0.15	99.9%	34	150
OR-X-01-DC1205	coal dryer (CDX1)	30,000	0.005	1.29	5.63	99.9%	1,286	5,631
OR-X-01-DC2205	dry dryer (CDX2)	30,000	0.005	1.29	5.63	99.9%	1,286	5,631
OR-X-02-DC1105	coal crusher (CCX1)	2,500	0.005	0.11	0.47	99.9%	107	469
OR-X-02-DC2105	coal crusher (CCX2)	2,500	0.005	0.11	0.47	99.9%	107	469
OR-X-03-DC1105	blend #1 (CBSBX)	2,500	0.005	0.11	0.47	99.9%	107	469
OR-X-04-DC1105	blend #1 feed hopper (CBSBX)	800	0.005	0.03	0.15	99.9%	34	150
OR-X-05-DC1205	Carborec crusher (CBSBX)	2,500	0.005	0.11	0.47	99.9%	107	469
OR-X-05-DC1405	Carborec crusher (CBSBX)	9,600	0.005	0.41	1.80	99.9%	411	1,802
OR-X-05-DC6070	Carborec bin (CBSBX)	850	0.005	0.04	0.16	99.9%	36	160
OR-X-06-DC1405	blend #2 bin (CBSBX)	850	0.005	0.04	0.16	99.9%	36	160
OR-X-06-DC1205	green fines (FPHLX)	2,500	0.005	0.11	0.47	99.9%	107	469
OR-X-12-DC1006	lime bin (LSX)	850	0.005	0.04	0.16	99.9%	36	160
			Totals:	**3.93**	**17.20**		3,927.86	17,204.01

Where: X =
A for CASP A
B for CASP B
C for CASP C
D for CASP D

Methodology:
Controlled PTE PM/PM10 (lb/hr) = air flow (acfm) * loading (grain/dscf) * 60 (min/hr) * 1/7000 (gr/lb)
Controlled PTE PM/PM10 (tpy) = Controlled PTE (lb/hr) * 8760 hrs/yr * 1/2000 lb/ton
Uncontrolled PTE PM/PM10 (lb/hr) = controlled PTE PM/PM10 (lb/hr) / (1- Control Eff.)
Uncontrolled PTE PM/PM10 (tpy) = Uncontrolled PTE (tpy) / (1- Control Eff)

Control Efficiency of 99.9% used as a conservative estimate

Appendix A: Emission Calculations
Generators and Fire Pumps

Company Name: U.S. Steel - Gary Works
Company Address: One North Broadway, Gary, Indiana 46402
Significant Source Modification No.: 089-28848-00121
Significant Permit Modification No.: 089-29236-00121
Reviewer: Jenny Acker
Date: March 15, 2010

Engine Description (per CASP)	Fuel Type	Rating (kW)	Rating (Hp)	Rating (MMBtu/hr)	Annual Hrs of Operation	Potential Throughput (MMBtu/yr)	Sulfur Content (S) of Fuel (% weight)
Fire Pump	diesel	235	315	2.2	500	1,102	0.05
Generator 1	diesel	1,650	2,211	15.5	500	7,739	0.05
Generator 2	diesel	1,650	2,211	15.5	500	7,739	0.05
Generator 3	NG	450	603	4.2	500	2,111	0.05

	Pollutant						
	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
	Generators 1 & 2 (Diesel Fuel > 600 Hp)						
Emission Factor in lb/MMBtu	0.10	5.73E-02	5.73E-02	0.05 *(1.01S)*	3.20	0.09	0.85
Potential Emission in tons/yr	**0.77**	**0.44**	**0.44**	**0.39**	**24.76**	**0.70**	**6.58**
	Fire Pumps (Diesel Fuel < 600 Hp)						
Emission Factor in lb/MMBtu	0.31	0.31	0.31	0.05 *(1.01S)*	4.41	0.07	0.95
Potential Emission in tons/yr	**0.06**	**0.03**	**0.03**	**0.03**	**1.76**	**0.05**	**0.47**
	Generator 3 (Natural Gas Fuel)						
Emission Factor in lb/MMBtu	1.90E-03	6.60E-03	6.60E-03	0.05 *(1.01S)*	0.32	2.10E-03	8.20E-02
Potential Emission in tons/yr	**2.00E-03**	**6.96E-03**	**6.96E-03**	**5.33E-02**	**3.38E-01**	**2.22E-03**	**8.65E-02**
Totals (tpy) (per CASP):	**0.83**	**0.48**	**0.48**	**0.47**	**26.86**	**0.75**	**7.13**

HAP	Diesel > 600 Hp		Natural Gas	
	lb/MMBtu	tpy	lb/MMBtu	tpy
1,3-Butadiene	--	--	4.30E-07	4.54E-07
Acenaphthene	4.68E-05	3.62E-04	--	--
Acenaphthylene	9.23E-06	7.14E-05	--	--
Acetaldehyde	2.52E-05	1.95E-04	4.00E-05	4.22E-05
Acrolein	7.88E-06	6.10E-05	6.40E-06	6.75E-06
Anthracene	1.23E-06	9.52E-06	--	--
Benzene	7.76E-04	6.01E-03	1.20E-05	1.27E-05
Benz(a)anthracene	6.22E-07	4.81E-06	--	--
Benzo(a)pyrene	2.57E-07	1.99E-06	--	--
Benzo(b)fluoranthene	1.11E-06	8.59E-06	--	--
Benzo(g,h,i)perylene	5.56E-07	4.30E-06	--	--
Benzo(b,k)fluoranthene	2.18E-07	1.69E-06	--	--
Benzo(k)fluoranthene	--	--	--	--
Benzo(g,h,l)perylene	--	--	--	--
Chrysene[1]	1.53E-06	1.18E-05	--	--
Dibenzo(a,h)anthracene	3.46E-07	2.68E-06	--	--
Ethylbenzene	--	--	3.20E-05	3.38E-05
Fluoranthene	4.03E-06	3.12E-05	--	--
Fluorene	1.28E-05	9.91E-05	--	--
Formaldehyde	7.89E-05	6.11E-04	7.10E-04	7.49E-04
Indeno(1,2,3-cd)pyrene	4.14E-07	3.20E-06	--	--
Naphthalene	1.30E-04	1.01E-03	1.30E-06	1.37E-06
PAH	--	--	2.20E-06	2.32E-06
Phenanathrene	4.08E-05	3.16E-04	--	--
Propylene Oxide	--	--	2.90E-05	3.06E-05
Propylene	--	--	--	--
Pyrene	3.71E-06	2.87E-05	--	--
Toluene	2.81E-04	2.17E-03	1.30E-04	1.37E-04
Xylenes	1.93E-04	1.49E-03	6.40E-05	6.75E-05
		1.25E-02		1.08E-03
			TOTAL HAPs (per CASP):	**1.36E-02**

Methodology
Emission Factors are from AP 42 (Supplement B 10/96) Tables 3.1-1, 3.1-2a, 3.1-3, 3.4-1 , 3.4-2, 3.4-3, and 3.4-4
MMBtu/hr = output rating (hp) x 7,000 (btu/hp-hr) x 1 mmbtu / 1,000,000 btu
Potential Throughput (MMBtu/yr) = [Heat Input Capacity (MMBtu/hr)] * [Maximum Hours Operated per Year]
Potential Emission (tons/yr) = [Potential Throughput (MMBtu/yr)] * [Emission Factor (lb/MMBtu)] / [2,000 lb/ton]

Appendix A: Emissions Calculations
PM/PM10/PM2.5 Emissions from Cooling Towers

Company Name: U.S. Steel - Gary Works
Company Address: One North Broadway, Gary, Indiana 46402
Significant Source Modification No.: 089-28848-00121
Significant Permit Modification No.: 089-29236-00121
Reviewer: Jenny Acker
Date: March 15, 2010

Cooling Tower Description (per CASP)	Flowrate (gpm)	Drift Loss (%)	Density of Liquid (lb/gal)	Total Dissolved Solids (ppm)	Drift Mass (%)	Drift Mass Flowrate (lb/hr)	Total PM/PM10/PM2.5 Emissions	
							(lb/hr)	(tpy)
PFR 1 Tower	20,000	0.025%	8.34	1,000	31.30%	2,502	0.78	3.43
PFR 2 Tower	20,000	0.025%	8.34	1,000	31.30%	2,502	0.78	3.43
						Totals (per CASP):	**1.57**	**6.86**

Methodology
Drift Mass Flowrate (lb/hr) = Flowrate (gpm) x % Drift Loss x Density of Liquid (lb/gal) * 60 (min/hr)
PM/PM10/PM2.5 PTE (lb/hr) = % Drift Mass x Drift Mass Flowrate (lb/hr) x Total Dissolved Solids (ppm) /1,000,000
PM/PM10/PM2.5 PTE (ton/yr) = PM/PM10/PM2.5 PTE (lb/hr) x 8760 (hrs/yr) x 1/2000 (lb/ton)

Appendix A: Emissions Calculations
Baseline Emissions
(page 1 of 2)

Company Name: **U.S. Steel - Gary Works**
Company Address: **One North Broadway, Gary, Indiana 46402**
Significant Source Modification No.: **089-28848-00121**
Significant Permit Modification No.: **089-29236-00121**
Reviewer: **Jenny Acker**
Date: **March 15, 2010**

Units/Processes to be Shutdown as Part of Project

Units/Processes	CO			NOx			PM			PM10/PM2.5			SO2			VOC		
	2002	2003	Average	2002	2003	Average	2002	2003	Average	2002	2003	Average	2002	2003	Average	2002	2003	Average
#3 COB																		
underfire	222.49	203.34	212.92	514.19	469.94	492.07	232.38	212.38	222.38	222.83	203.66	213.25	138.44	126.52	132.48	153.27	140.08	146.68
charging	0	0	0.00	0	0	0.00	0.2	0.18	0.19	0.1	0.09	0.10	0	0	0.00	0	0	0.00
door leaks	1.84	1.6	1.72	0		0.00	3.96	3.61	3.79	3.96	3.61	3.79	0	0	0.00	0.3	0.27	0.29
pushing	50.43	46.09	48.26	9.39	8.59	8.99	63.45	58	60.73	27.59	25.22	26.41	17.8	16.27	17.04	1.98	1.81	1.90
topside	0.44	0.41	0.43	0	0	0.00	1.19	1.04	1.12	1.14	1.08	1.11	0	0	0.00	0.1	0.09	0.10
Totals:	275.2	251.44	**263.32**	523.58	478.53	**501.06**	301.18	275.21	**288.20**	255.62	233.66	**244.64**	156.24	142.79	**149.52**	155.65	142.25	**148.95**
#3 COB Precarb Facility	2669.85	2440.07	**2554.96**	33.62	30.73	**32.18**	78.84	72.05	**75.45**	76.87	70.25	**73.56**	4.94	4.52	**4.73**	391.08	357.42	**374.25**
#5 COB																		
underfire	141.28	140.72	141.00	326.3	325.01	325.66	105.11	104.69	104.90	100.86	100.47	100.67	55.45	56.23	55.84	97.34	96.96	97.15
charging	0	0	0.00	0	0	0.00	0.19	0.19	0.19	0.09	0.09	0.09	0	0	0.00	0	0	0.00
door leaks	0.57	0.57	0.57	0	0	0.00	1.52	1.51	1.52	1.52	1.51	1.52	0	0	0.00	0.11	0.11	0.11
pushing	19.32	19.24	19.28	3.6	3.58	3.59	17.92	17.85	17.89	7.79	7.76	32.01	6.82	6.79	51.89	0.76	0.75	0.76
topside	0.17	0.17	0.17	0	0	0.00	0.45	0.45	0.45	0.44	0.43	0.44	0	0	0.00	0.04	0.04	0.04
Totals:			**161.02**			**329.25**			**124.94**			**134.72**			**107.73**			**98.06**
#7 COB																		
underfire	147.99	147.77	147.88	341.79	341.3	341.55	101.76	101.62	101.69	97.6	97.46	97.53	59.13	59.05	59.09	101.96	101.81	101.89
charging	0	0	0.00	0	0	0.00	0.2	0.2	0.20	0.1	0.1	0.10	0	0	0.00	0	0	0.00
door leaks	0.6	0.59	0.60	0	0	0.00	1.59	1.58	1.59	1.59	1.58	1.59	0	0	0.00	0.12	0.12	0.12
pushing	20.23	20.2	20.22	3.77	3.76	3.77	18.77	18.75	18.76	8.16	8.15	8.16	7.14	7.13	7.14	0.79	0.79	0.79
topside	0.18	0.18	0.18	0	0	0.00	0.48	0.48	0.48	0.46	0.46	0.46	0	0	0.00	0.04	0.04	0.04
Totals:			**168.87**			**345.31**			**122.72**			**107.83**			**66.23**			**102.84**
#5,6 Coke Quench Towers	0	0	**0.00**	0	0	**0.00**	28.09	28.02	**28.06**	6.43	6.41	**6.42**	0	0	**0.00**	1.36	1.35	**1.36**

Baseline Emissions (tpy)

Unit/Processes	CO			NOx			PM			PM10/PM2.5			SO2			VOC		
	2002	2003	Average	2002	2003	Average	2002	2003	Average	2002	2003	Average	2002	2003	Average	2002	2003	Average
Pulverizer Building	0	0	**0**	0	0	**0**	1.72	1.65	**1.685**	0.78	0.75	**0.765**	0	0	**0**	0	0	**0**
Rail Car Side Thawing (Combustion of NG)	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**
Rail Car Bottom Thawing																		
Comb. Sweet COG	0.28	0.39	0.335	1.21	1.71	1.46	0.09	0.13	0.11	0.07	0.09	0.08	1.19	11.72	6.455	0.02	0.03	0.025
Comb. Sour COG	0.07	0	0.035	0.3	0	0.15	0.02	0	0.01	0.02	0	0.01	0.58	0	0.29	0	0	0
Total (Rail Car Bottom)			**0.37**			**1.61**			**0.12**			**0.09**			**6.75**			**0.03**
Baseline Emissions Total:			**0.37**			**1.61**			**1.81**			**0.86**			**6.75**			**0.03**

Appendix A: Emissions Calculations
Baseline Emissions
(page 2 of 2)

Unit/Processes [1]	Worst Case Future Allowable Emissions (tpy)																	
	CO			NOx			PM			PM10/PM2.5			SO2			VOC		
	E.F.	MMBtu/hr	PTE	E.F.	MMBtu/hr	PTE	E.F.	MMBtu/hr	PTE	E.F.	MMBtu/hr	PTE	E.F.	MMBtu/hr	PTE	E.F.	MMBtu/hr	PTE
Rail Car Side Thawing																		
Natural Gas	84	15	**5.52**	100	15	**6.57**	7.6	15	**0.50**	3	15	**0.20**	0.6	15	**0.04**	5.5	15	**0.36**
Rail Car Bottom Thawing																		
Comb. Sweet COG	18.4	25	2.01	80	25	8.76	6.2	25	0.68	4.35	25	0.48	79.29	25	8.68	1.2	25	0.13
Comb. Sour COG	18.4	25	2.01	80	25	8.76	6.2	25	0.68	4.35	25	0.48	156.19	25	17.10	1.2	25	0.13
Worst Case (Rail Car Bottom)			**2.01**			**8.76**			**0.68**			**0.48**			**17.10**			**0.13**
Future Allowable Total:			**7.53**			**15.33**			**1.18**			**0.67**			**17.14**			**0.49**

[1] Methodology: PTE = E.F. (lb/MMscf) * 1 MMscf /1,000 MMBtu * 8760 hrs/yr * 1 ton/2,000 lbs

Worst Case Future Allowable Emissions (tpy)		
Coal Handling Processes [2]	PM	PM10/PM2.5
Railcar Dumper (RCD-1)	0.876	0.5256
Reclaim Hopper (RCH-1)	0.876	0.5256
Car Dump Hopper 1/C1 (FS-8)	0.876	0.5256
Car Dump Hopper 2/C1 (FS-9)	0.876	0.5256
Car Dump Hopper 3/C1 (FS-10)	0.876	0.5256
Trnsfr pt C1/C2 (FS-2)	0.876	0.5256
Reclaim Hopper/C2 (FS-14)	0.876	0.5256
Sceen Trnsfr/C2 (FS-3)	0.876	0.5256
Totals:	7.008	4.2048

[2] Methodology
PM/PM10 emissions (tpy) based on limited permitted emissions (lb/hr) at 8760 hrs of operation per year.
PM10 = PM2.5

Appendix A: Emissions Calculations
Contemporaneous Emissions

Company Name: U.S. Steel - Gary Works
Company Address: One North Broadway, Gary, Indiana 46402
Significant Source Modification No.: 089-28848-00121
Significant Permit Modification No.: 089-29236-00121
Reviewer: Jenny Acker
Date: March 15, 2010

Company	Permit #	Date Issued	PM	PM10	PM2.5	SO2	NOx	VOC	CO
stockhouse baghouse									
USS Gary	T089-27690-00121	10/5/2009	7.54	10.82	9.41	--	--	--	--
RCRA Groundwater Remediation									
USS Gary	T089-27151-00121	1/12/2009	--	--	--	--	--	2.5	--
BF #14 reline and production increase									
USS Gary	T089-20118-00121	10/20/2005	4.2	3.8	3.8	7.2	2.4	0.054	99
84" hot strip mill									
USS Gary	T089-19709-00121	5/2/2005	--	--	--	--	--	1.06	--
#5/6 ETL controls									
USS Gary	T089-18862-00121	5/27/2004	--	--	--	--	--	--	--
Added materisl handling equipment									
South Shore Slag	T089-28293-00133	11/30/2009	22.68	9.89	9.89	2.32	35.34	2.88	7.61
added 2 months to operating period									
Heritage	T089-14305-05210	6/22/2006	--	--	--	--	--	--	--
paint booth									
Brandenburg	T089-19781	3/1/2005	--	--	--	--	--	2.1	--
		Totals	34.42	24.51	23.1	9.52	37.74	8.594	106.61

Appendix B to
Technical Support Document to
Significant Source Modification No. 089-28848-00121 and
Significant Permit Modification No. 089-29236-00121

United States Steel Corporation
Research and Technology Center
800 East Waterfront Drive
Munhall, PA 15120-5044

Interorganization Correspondence

To: Mr. T. C. Ruffner
Project Engineer - Carbonyx
Engineering

Date: April 27, 2010

From: Dr. K. L. Zeik
General Manager
Research

Subject: ***Use of Cokonyx™ as a Source of Carbon in the Blast Furnace***

As you requested, U. S. Steel Research has reviewed its test data for Cokonyx™ produced at the Carbonyx, Ardmore, OK facility, and also the data collected during a 5500 ton trial at the U. S. Steel Fairfield Works No. 8 blast furnace performed in October 2009. We conclude that the substitution of Cokonyx™ carbon alloy for blast furnace coke created no difference in blast furnace performance, based on U. S. Steel monitoring of materials into and out of the Fairfield blast furnace during this trial. Details follow.

In 2009, the Carbonyx facility located in Ardmore, OK produced approximately 5500 tons of Cokonyx™ carbon alloy for U. S. Steel, using a standard blend of metallurgical coals supplied by U. S. Steel. During this production trial, Research collected and tested Cokonyx™ and found that the chemical composition and the physical properties of this carbon alloy were very similar to typical blast furnace coke. The fixed carbon content (88.8%), ash content (10.1%) and sulfur content (0.69%) were comparable to coke consumed in U. S. Steel blast furnaces. For comparison, the ranges for these variables for various types of coke are: fixed carbon from 86.8 to 91.2 percent, ash from 8.3 to 11.9 percent, and sulfur from 0.48 to 0.75 percent. Similarly, the stability and mean particle size of the Cokonyx™ averaged 60.1 and 1.9 inches, respectively, in the production trial. In comparison, the stability of typical blast furnace coke ranges from 55 to 65, and its mean size varies between 1.5 and 2.5 inches.

The raw materials charged into the top of a blast furnace are usually an iron oxide (ore, pellets or sinter), a source of fluxing materials (limestone, dolomite or steelmaking slag) and a source of carbon (coke). There may also be pulverized coal, natural gas, or some other type of carbon-bearing material injected at the base of the furnace. Near the bottom of the furnace, a large quantity of preheated air is introduced to support the entire process and all the reactions. The hot air reacts with the coke to produce carbon monoxide, which in turn reacts with the iron oxide in the furnace to produce metallic iron. These reactions generate enough heat to produce liquid iron, which is removed at the bottom of the furnace, along with a slag that serves to remove the undesirable contaminants from the furnace, including the majority of the sulfur in the furnace. The gaseous reaction products exit the furnace at the top. The gases are composed of carbon monoxide (CO), carbon dioxide (CO_2), hydrogen (H_2) and water, and are transported to boilers or burners to recover the chemical energy that remains in the gases.

On October 13, 2009, a blast furnace production trial, using Cokonyx™, was performed at the U. S. Steel Fairfield Works No. 8 blast furnace. The trial lasted until October 31, 2009. During this trial, the Cokonyx™ carbon alloy was substituted for the blast furnace coke (both domestic and Japanese) on a 1 to 1 replacement ratio, in quantities up to 50 percent replacement. The blast furnace was monitored for raw material consumption, energy usage and production levels before, during and after the trial period. Based on the information collected, it was concluded that the use of Cokonyx™ carbon alloy as a substitute for blast furnace coke created no difference in blast furnace performance, including energy consumption and productivity. Because the characteristics of the carbon alloy are very similar to coke, and the furnace operation was not altered by the use of carbon alloy as a coke replacement, no changes to the gas composition exiting the furnace are anticipated. All of this information was collected, reported and archived in internal U. S. Steel documents.

If you have any additional questions, I can be reached at Research Munhall (412) 433-7210 or by email at kzeik@uss.com.

KLZ/fm

cc: M. H. Best
A. R. Bridge
F. T. Harnack
M. Jeffrey
K. J. Kallaher
F. J. Mikulski
R. R. Terza
R. W. Wargo
T. Woodwell
Central Files

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Mark Jeffrey
U.S. Steel - Gary Works
Penn Liberty Plaza 1 1350 Penn Ave Ste 200
Pittsburgh, PA 15222

DATE: August 4, 2010

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
Part 70 SSM
089-28848-00121

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

August 4, 2010

TO: Gary Public Library

From: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: U.S. Steel - Gary Works
Permit Number: 089-28848-00121

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 11/30/07

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

TO: Interested Parties / Applicant

DATE: August 4, 2010

RE: U.S. Steel - Gary Works / 089-28848-00121

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

In order to conserve paper and reduce postage costs, IDEM's Office of Air Quality is now sending many permit decisions on CDs in Adobe PDF format. The enclosed CD contains information regarding the company named above.

This permit is also available on the IDEM website at:
http://www.in.gov/ai/appfiles/idem-caats/

If you would like to request a paper copy of the permit document, please contact IDEM's central file room at:

Indiana Government Center North, Room 1201
100 North Senate Avenue, MC 50-07
Indianapolis, IN 46204
Phone: 1-800-451-6027 (ext. 4-0965)
Fax (317) 232-8659

Please Note: *If you feel you have received this information in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV.*

Enclosures
CD Memo.dot 11/14/08

Mail Code 61-53

IDEM Staff	CDENNY 08/04/2010 US Steel - Gary Works 089-28848-00121 (final)			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Mark Jeffrey US Steel - Gary Works Penn Liberty Plaza 1; 1350 Penn Ave, Ste 200 Pittsburgh PA 15222-1211 (Source CAATS)									
2		Fred Harnack GM - Environmental US Steel - Gary Works 1350 Pnn Ave, Ste 200 Pittsburgh PA 15222-1211 *(RO CAATS)*									
3		East Chicago City Council 4525 Indianapolis Blvd East Chicago IN 46312 *(Local Official)*									
4		Gary - Hobart Water Corp 650 Madison St, P.O. Box M486 Gary IN 46401-0486 *(Affected Party)*									
5		Gary Mayors Office 401 Broadway # 203 Gary IN 46402 *(Local Official)*									
6		Gary Public Library 220 W 5th Avenue Gary IN 46402 *(Library)*									
7		Lake County Health Department-Gary 1145 W. 5th Ave Gary IN 46402-1795 *(Health Department)*									
8		WJOB / WZVN Radio 6405 Olcott Ave Hammond IN 46320 *(Affected Party)*									
9		Laurence A. McHugh Barnes & Thornburg 100 North Michigan South Bend IN 46601-1632 *(Affected Party)*									
10		Shawn Sobocinski 3229 E. Atlanta Court Portage IN 46368 *(Affected Party)*									
11		Ms. Carolyn Marsh Lake Michigan Calumet Advisory Council 1804 Oliver St Whiting IN 46394-1725 *(Affected Party)*									
12		Mark Coleman 9 Locust Place Ogden Dunes IN 46368 *(Affected Party)*									
13		Mr. Chris Hernandez Pipefitters Association, Local Union 597 8762 Louisiana St., Suite G Merrillville IN 46410 (Affected Party)									
14		Craig Hogarth 7901 West Morris Street Indianapolis IN 46231 *(Affected Party)*									
15		Lake County Commissioners 2293 N. Main St, Building A 3rd Floor Crown Point IN 46307 *(Local Official)*									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

FACSIMILIE OF PS Form 3877

Mail Code 61-53

IDEM Staff	CDENNY 08/04/2010 US Steel - Gary Works 089-28848-00121 (final)			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Northwestern In Regional Planning Com (NIRPC) 6100 Southport Road Portage IN 46368 (Affected Party)									
2		Anthony Copeland 2006 E. 140th Street East Chicago IN 46312 *(Affected Party)*									
3		Barbara G. Perez 506 Lilac Street East Chicago IN 46312 *(Affected Party)*									
4		Mr. Robert Garcia 3733 Parrish Avenue East Chicago IN 46312 *(Affected Party)*									
5		Mr. David Behrens US Steel 1 North Broadway MS 70A Gary IN 46373 *(Affected Party)*									
6		Ms. Karen Kroczek 8212 Madison Ave Munster IN 46321-1627 *(Affected Party)*									
7		Calumet Township Trustee 31 E 5th Avenue Gary IN 46402 *(Affected Party)*									
8		Joseph Hero 11723 S Oakridge Drive St. John IN 46373 *(Affected Party)*									
9		Kay Nelson Northwest Indiana Forum 6100 Southport Rd Portage IN 46368 *(Affected Party)*									
10		Gary City Council 401 Broadway # 209 Gary IN 46402 *(Local Official)*									
11		George Mesing Environmental Quality Management, Inc. 500 Market Street Suite 302 Bridgewater PA 15009 *(Consultant)*									
12		Doreen Carey Gary Dept. of Envrionmental Affairs 839 Broadway N206 Gary IN 46402 *(Local Official)*									
13		Mr. Larry Davis 268 South, 600 West Hebron IN 46341 (Affected Party)									
14		Marjory Crawford 324 E Morgan Ave Chesterton IN 46304 *(Affected Party)*									
15		Charlotte Read 1453 N Tremont Rd Chesterton IN 46304 *(Affected Party)*									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

FACSIMILIE OF PS Form 3877

Mail Code 61-53

IDEM Staff	CDENNY 08/04/2010 US Steel - Gary Works 089-28848-00121 (final)			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Tom 7549 Crested Butte Dr Plano TX 75025 (Affected Party)									
2		Warren G. Blackmon 6832 E 3rd Ave Gary IN 46403-2417 *(Affected Party)*									
3		Kay Nelson Forum 6100 Southport Road Portage IN *(Affected Party)*									
4		Peter Julovich Gary Enivronmental Affairs Department 839 Broadway Gary IN 46402 *(Affected Party)*									
5		Marjorie Wood Crawford 324 E Morgan Avenue Chesterton IN 46304 *(Affected Party)*									
6		Chuck Mosley Third Floor Statehouse Indianapolis IN 46204 *(Affected Party)*									
7											
8											
9											
10											
11											
12											
13											
14											
15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

FACSIMILIE OF PS Form 3877