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: April 4, 2008

RE: Nucor Steel / 107-26116-00038

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

Notice of Decision – Approval

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 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires 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 from 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-AM.dot12/3/07

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Mr. David Sulc
Nucor Steel
4357 South Nucor Road
Crawfordsville, Indiana 47933

April 4, 2008

Re: 107-26116-00038
Administrative Amendment to:
Part 70 Operating Permit No.107-7172-00038

Dear Mr. Sulc:

Nucor Steel was issued Part 70 operating permit T107-7172-00038 on December 29, 2006 for a steel mini-mill. An application for the following change was received on February 20, 2008:

(a) Replacement of the existing 26 million British thermal units per hour (MMBtu/hr) burners in Shuttle Furnaces 1 and 2.

Pursuant to the provisions of 326 IAC 2-7-11, the permit is hereby administratively amended as follows (new language appears in **bold** and deleted language appears as ~~struck-through~~):

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

This stationary source consists of the following emission units and pollution control devices:

D.27 – HOT STRIP MILL & TUNNEL FURNACE SYSTEM

(jj) ***

(3) Shuttle Furnaces 1 and 2 – Natural gas fired with a heat input capacity of 13 MMBtu per hour each using low NOx burners. Shuttle Furnaces 1 and 2 were constructed in 1994, **and approved for a burner replacement in 2008.**

SECTION D.27 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

HOT STRIP MILL & TUNNEL FURNACE SYSTEM

(jj) ***

(3) Shuttle Furnaces 1 and 2 – Natural gas fired with a heat input capacity of 13 MMBtu per hour each using low NOx burners. Shuttle Furnaces 1 and 2 were constructed in 1994, **and approved for a burner replacement in 2008.**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

All conditions of the permit shall remain unchanged and in effect. Please find a copy of the revised Part 70 permit.

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, please contact Aida De Guzman at (800) 451-6027, press 0 and ask for extension (3-4972), or dial (317) 233-4972.

Sincerely,

Original signed by Don Robin for
Matthew Stuckey, Chief
Permits Branch
Office of Air Quality

Attachments
APD

cc: Montgomery County
Montgomery County Health Department
Air Compliance Section Inspector
Compliance Data Section
Administrative and Development

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

Nucor Steel
4537 South Nucor Road
Crawfordsville, Indiana 47933

(herein known as the Permittee) is hereby authorized to construct subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this Permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This approval 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.

Operation Permit No. 107-24699-00038	
Original signed by: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: December 29, 2006 Expiration Date: December 29, 2011

First Administrative Amendment No. 107-24009-00038, issued on January 26, 2007,
First Significant Permit Modification No. 107-24022-00038, issued on April 20, 2007,
Second Significant Permit Modification No. 107-24284-00038, issued on August 8, 2007, and
Third Significant Permit Modification No. 107-24699-00038, issued on January 22, 2008.

Second Administrative Amendment No. 107-26116-00038	
Issued by: *Original signed by Don Robin for* Matt Stuckey, Chief Permits Branch Office of Air Quality	Issuance Date: April 4, 2008 Expiration Date: December 29, 2011

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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 through 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 a stationary steel mini-mill.

Source Address:	4537 South Nucor Road, Crawfordsville, Indiana 47933
Mailing Address:	4537 South Nucor Road, Crawfordsville, Indiana 47933
General Source Phone Number:	(765) 364-1323
SIC Code:	3312
County Location:	Montgomery
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules 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 steel mini-mill consists of a source with on-site contractors:

(a) Nucor Steel, the primary operation, is located at 4537 South Nucor Road, Crawfordsville, Indiana, 47933;

(b) Whitesville Mill Processing, the supporting operation, is located at 4537 South Nucor Road, Crawfordsville, Indiana, 47933; and

(c) BOC Gases, the supporting operation, is located at 4537 South Nucor Road, Crawfordsville, Indiana, 47933.

(d) Heritage Environmental Services, the supporting operation, is located at 4537 South Nucor Road, Crawfordsville, Indiana, 47933.

One combined Part 70 permit will be issued to Nucor Steel, Whitesville Mill Processing, BOC Gases, and Heritage Environmental Services. The new plant ID for the combined source is 107-00038.

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

This stationary source consists of the following emission units and pollution control devices:

D.1 – CASTRIP – VACUUM DEGASSER AND FLARE

(a) One (1) vacuum degasser with process gas lances, identified as V #1, constructed in 2004, to be modified in 2006, a maximum capacity of 270 tons of steel/hour, emissions controlled by a closed flare, and exhausting to Stack 500. This vacuum degasser removes entrained gases from the steel. Desulfurization and/or decarburization may also occur during the degassing process. The enclosed flare burner has a maximum heat input capacity of 2 MMBtu/hour, uses natural gas as its primary fuel with propane as back up fuel, and operates with a minimum temperature of 1,400 ^{o}F. The flare only operates when the vacuum degasser is in the degassing mode (i.e., when CO must be controlled).

D.2 – CASTRIP – LOW NOx BOILER

(b) One (1) natural gas fueled low-NO_x boiler, identified as Boiler ID No. 501, constructed in 2004, a heat input capacity of 71.04 MMBtu/hour, utilizing low-NOx burners, and exhausting to Stack 501. This boiler provides steam to the vacuum degasser. Propane will be used as back up fuel.

Under 40 CFR Part 60, Subpart Dc, this unit is considered a steam generating unit.

D.3 – CASTRIP – PREHEATERS, DRYERS, AND ALLOY UNLOADING

(c) One (1) natural gas fueled ladle preheater, identified as LP-3, constructed in 2004, to be modified in 2006, a heat input capacity of 12 MMBtu/hour utilizing low NOx burners, emissions uncontrolled, and exhausting to a roof monitor (S-21, also identified as 105,106). Some emissions of this ladle preheater may also exhaust through the Castrip LMS Baghouse stack S-20. Propane will be used as back up fuel.

(d) Two (2) natural gas-fired ladle preheaters, identified as LP-1 and LP-2, and one (1) natural gas-fired ladle dryer identified as LD-1, each constructed in 2002, to be modified in 2007, a heat input capacity of 12 MMBtu/hour each, utilizing low-NOx burners, and the capability to utilize propane as a backup fuel. The preheaters exhaust to roof monitor S-21. The ladle dryer exhausts to baghouse stack S-20.

(e) Two (2) natural gas-fired tundish preheaters, identified as TP-1 and TP-2, constructed in 2002, to be modified in 2006, a heat input capacity of 10 MMBtu per hour each, utilizing oxy-fuel burners, and have the capability to utilize propane as a backup fuel. Emissions exhaust to LMS baghouse stack S-20.

(f) Two (2) natural gas-fired tundish nozzle preheaters identified as TNP-1 and TNP-2, to be modified in 2006. Each tundish nozzle preheater shall be equipped with low-NOx burners, shall not exceed a maximum heat input rate of 2 MMBtu per hour, and has the capability to utilize propane as a backup fuel. Combustion emissions exhaust to the LMS baghouse stack identified as S-20.

(g) Three (3) natural gas-fired tundish dryers, identified as TD-1, TD-2, and TD-3, constructed in 2002, to be modified in 2006, with a maximum heat input capacity of 4 MMBtu per hour, 3 MMBtu per hour, and 1 MMBtu per hour, respectively, utilizing low-NOx burners, and having the capability to utilize propane as a backup fuel. Emissions exhaust to roof monitor S-21.

(h) Two (2) natural gas-fired transition piece preheaters, identified as TPP-3 and TPP-4, and two (2) natural gas-fired transition piece dryers, identified as TPD-1 and TPD-2, constructed in 2002, to be modified in 2006. The two (2) transition piece preheaters have a heat input capacity of 2 MMBtu per hour each for a combined total capacity of 4.0 MMBtu per hour, the two (2) transition piece dryers have heat input capacity of 0.15 MMBtu per hour each, utilizing low-NOx burners. The preheaters exhaust to baghouse stack S-20. The dryers exhaust to roof monitor S-21. The preheaters are used in the tundish operation located on the caster deck. The transition piece preheaters and transition piece dryers utilize propane as a backup fuel.

(i) Associated VTD alloy unloading, storage and feed systems, identified as AU-2, constructed in 2005, and consisting of:

(1) One (1) alloy truck dump station.

(2) Truck unloading/conveyors.

(3) Storage hoppers, all exhausting to a common bin vent, rated at 0.01 grains per dry standard cubic foot, into the building.

Alloy unloading is performed in a 3-sided building along the side of the existing Castrip building. Emissions exhaust to the atmosphere.

(j) Dumping, storage, and transfer operations of alloy raw materials for the strip caster plant, identified as AU-1 and constructed in 2002.

D.4 - CASTRIP – LMS, TUNDISH, AND CONTINUOUS STRIP CASTER

(k) A strip caster line rated at a maximum steel production rate of 270 tons per hour consisting of:

(1) One (1) ladle metallurgy station, identified as LMS-2, constructed in 2002, to be modified in 2006, and maximum production capacity of 270 tons of steel per hour, and emissions captured by a side draft hood that has a PM capture efficiency of 99 percent and controlled by the LMS-2 baghouse, and exhausting to the LMS-2 baghouse stack identified as S-20. The remaining uncontrolled emissions shall be exhausted through the LMS-2 roof monitor identified as S-21. The LMS-2 baghouse has an enclosed dust handling system or equivalent for material recovery and particulate matter control.

(2) Tundishes, identified as T-1, constructed in 2002, to be modified in 2006, with a maximum production capacity of 270 tons of steel per hour. The two (2) natural gas-fired tundish preheaters, identified as TP-1 and TP-2 and the three (3) natural gas-fired tundish dryers, identified as TD-1, TD-2 and TD-3, supply heat to the tundish. Only one (1) tundish may be operated at a given time. The tundish in operation feeds the molten metal from the LMS-2 ladle to one (1) continuous strip caster identified as CS-1.

(3) One (1) continuous strip caster, identified as CS-1, constructed in 2002, to be modified in 2006, a maximum capacity of 270 tons of steel per hour, and emissions captured by a canopy hood that has a PM capture efficiency of 98 percent. The captured PM in the gas stream shall be controlled by the LMS-2 baghouse and the gas stream shall be exhausted though the LMS-2 baghouse stack identified as S-20. The remaining uncontrolled emissions shall be exhausted through the LMS-2 roof monitor identified as S-21.

D.5 – INSIGNIFICANT ACTIVITIES – MISCELLANEOUS SILOS (See Condition A.4)

D.6 – INSIGNIFICANT ACTIVITIES – CASTRIP – COILERS, COIL CUTTING, AND HOT ROLLING STAND (See Condition A.4)

D.7 – WASTEWATER TREATMENT PLANT

(l) One wastewater treatment plant, identified as WWTP, constructed in September 2002, consisting of two water recovery systems i.e. oil/alkali wastes and acid rinse water, and surge vessels for the regenerated acid, acid rinse water and spent pickle liquor. The WWTP consists of following:

(1) Oily waste tanks:

(A) Two (2) batch treatment tanks, identified as T-853 and T-854, with a maximum capacity of 12,000 gallons each, with emissions uncontrolled, and exhausting inside the building.

(B) One (1) decant oil tank, identified as T-856, with maximum capacity of 9,000 gallons with emissions uncontrolled, and exhausting inside the building.

(C) One (1) oily waste evaporator feed tank, identified as T-858, with maximum capacity of 20,000 gallons with emissions uncontrolled.

(D) One (1) oily waste evaporator concentrate tank, identified as T-857, with maximum capacity of 20,000 gallons with emissions uncontrolled, and exhausting inside the building.

(2) Acid tanks:

(A) Three (3) acid rinse water surge tanks, identified as T-850, T-851 and T-852, with a maximum capacity of 33,000 gallons each, with emissions controlled by the pickle line scrubber #1, and exhausting to stack S-17.

(B) One (1) lime neutralization tank, identified as T-875, with maximum capacity of 10,000 gallons, with emissions controlled by a wet particulate scrubber, and exhausting to stack S-60.

(C) One (1) acidic rinse evaporator feed tank, identified as T-877, with maximum capacity of 20,000 gallons with emissions uncontrolled and exhausting to stack S-17.

(D) One (1) acidic rinse evaporator concentrator tank, identified as T-878, with maximum capacity of 20,000 gallons with emissions uncontrolled and exhausting to stack S-17.

(3) Two (2) closed chamber type evaporators, identified as EV-1 and EV-2, each with a maximum capacity of 1,800 gallons per hour. This is a closed loop system with no emissions.

(m) Three (3) regenerated acid tanks, identified as T-867, T-868 and T-869, constructed in September 2002, with a maximum capacity of 33,000 gallons each, with emissions controlled by the pickle line scrubber, and exhausting to S-17.

Under 40 CFR Part 63, Subpart CCC, these units are considered new hydrochloric acid storage vessels.

(n) Four (4) spent pickle liquor tanks, identified as T-863, T-864, T-865 and T-866, constructed in September 2002, each with a maximum capacity of 33,000 gallons each, with emissions controlled by the pickle line scrubber, and exhausting to S-17.

(o) Lime silo system, constructed in 1989 and relocated in September 2002, including the following equipment:

(1) One (1) lime silo, identified as TFS-1, with a maximum capacity of 60,000 pounds.

(2) One (1) live bin bottom.

(3) One (1) screw conveyor.

(4) One (1) wet particulate scrubber.

D.8 – SLAG PROCESSING

(p) Slag processing, identified as EU-10, constructed in 1989, is performed by Whitesville Mill Service Company, an on-site contractor. Slag and other steel mill related materials are transported by slag pots or other mobile equipment, processed, and stockpiled with a maximum throughput of 305 tons/hr. This emission unit consists of storage piles (unprocessed and processed materials), grizzly feeding, slag processing (screening, conveying, and crushing), slag pot dumping, product loading for transport, and unpaved

roads. The fugitive emissions from slag processing are controlled by water sprays and exhaust to the atmosphere.

(q) One (1) mill scale screen and conveyor system, identified as MSS-1, constructed in 2001, with a maximum throughput rate of 350 tons of mill scale per hour, with emissions uncontrolled, and exhausting to the atmosphere.

D.9 – BOC GASES PLANT

(r) The BOC Gases Plant is operated by BOC Gases, an on-site contractor. It provides gases (oxygen, nitrogen, hydrogen, argon, and liquid air) consisting of:

(1) One (1) natural gas-fired boiler identified as ID No. 1, constructed in 1989, with a heat input capacity of 9 MMBtu per hour, with emissions uncontrolled, and exhausting to stack S-36. This boiler uses propane as a backup fuel.

(2) One (1) natural gas-fired boiler, identified as ID No. 2, constructed in 1994, with a heat input capacity of 15.0 MMBtu per hour, with emissions uncontrolled, and exhausting to stack S-37. This boiler uses propane as a backup fuel.

Under 40 CFR Part 60, Subpart Dc, this unit is considered a steam generating unit.

(3) One (1) natural gas-fired boiler, identified as the hydrogen plant boiler, constructed in 1996, with a heat input capacity of 9.98 MMBtu per hour, with emissions uncontrolled, and exhausting to stack S-30. This boiler uses propane as a backup fuel.

D.10 – INSIGNIFICANT ACTIVITIES – PAVED AND UNPAVED ROADS (See Condition A.4)

D.11 – PETROLEUM PRODUCT STORAGE

(s) One (1) 500 gallon aboveground gasoline storage tank, identified as GST #1, installed in 1988, using submerged filling technology to control VOC emissions, which exhausts to the atmosphere.

(t) Three (3) 500 gallon aboveground diesel storage tanks, identified as DST #1, DST #2, and DST #3, all installed in 1988, using submerged filling technology to control VOC emissions, which exhausts to the atmosphere.

(u) One (1) 5,000 gallon aboveground diesel storage tank, identified as DST #4, installed in 1988, using submerged filling technology to control VOC emissions, which exhausts to the atmosphere.

D.12 – COOLING TOWERS

(v) The contact and noncontact cooling towers are equipped with drift eliminators. Each cooling tower exhausts to the atmosphere.

Cooling Towers	No. of Cells	Design Capacity (gal/min)	Cooling Towers	No. of Cells	Average Capacity (gal/min)
Meltshop Non Contact	9	60,000	Galvanizing/Annealing Non Contact	2	6,500
Meltshop Caster Contact	**~~4~~ 2**	5,000	Annealing Non Contact	2	5,000
Meltshop Caster Contact (expansion)	2	5,000	Castrip Contact	4	12,000

Cooling Towers	No. of Cells	Design Capacity (gal/min)	Cooling Towers	No. of Cells	Average Capacity (gal/min)
Hot Mill Contact	4	16,383	Castrip Non Contact	7	14,400
Hot Mill Contact (expansion)	1	4,000	Castrip Compressor Non Contact	3	2,400
Hot Mill Non Contact	4	25,319	BOC Non Contact (CT-91A)	1	750
Laminar Contact	3	11,600	BOC Non Contact (CT-91B)	2	3,200
Cold Mill Non Contact	2	10,000	Main Compressor Non Contact	4	3,200
Cold Mill Non Contact (expansion)	1	5,000			
Vacuum Degasser Contact	1	8,000	Vacuum Degasser Non Contact	1	8,000

D.13 – INSIGNIFICANT ACTIVITIES – SCRAP HANDLING AND PROCESSING

(See Condition A.4)

D.14 – EMERGENCY GENERATORS

(w) Diesel fired generators and air compressors for power outages and emergencies.

(1) Cold Mill generator, identified as GEN #3, constructed in 1997, with a capacity of 280 HP, with emissions uncontrolled.

(2) Hot Mill NC Cooling Tower generator, identified as GEN #1, constructed in 1989, with a capacity of 2,100 HP, with emissions uncontrolled.

(3) Galv Line Pot generator, identified as GEN #4, constructed in 1992, with a capacity of 890 HP, with emissions uncontrolled.

(4) MS Cooling Tower Cold Well generator, identified as GEN #2, constructed in 1996, with a capacity of 2,520 HP, with emissions uncontrolled.

D.15 – INSIGNIFICANT ACTIVITIES – GASOLINE DISPENSING FACILITIES
(See Condition A.4)

D.16 – COLD MILL – PICKLE LINES 1 AND 2

(x) Both Pickle Lines use enhanced HCl pickling solution and rinse water and are equipped with process tanks.

(1) Pickle Line 1, identified as PL1, constructed in 1988, with a maximum capacity of 250 tons/hr, controlled by a counter flow-packed scrubber and mist eliminators, and exhausting to stack S-17. The Pickle Line 1 scrubber has a design flow rate of 12,000 acf/min and a loading of 0.01 gr/dscf. Each pickle line has an electric static oiler.

Under 40 CFR Part 63, Subpart CCC, Pickle Line 1 is considered an existing continuous pickle line.

(2) Pickle Line 2, consisting of the following units:

(A) One (1) Pickle Line, identified as PL2, constructed in 1997, with a maximum capacity of 250 tons/hr, controlled by a tray scrubber and mist eliminators, and exhausting to stack S-18. The Pickle Line 2 scrubber has a design flow rate of 9,000 acf/min and a loading of 0.01 gr/dscf. Each pickle line has an electric static oiler.

Under 40 CFR Part 63, Subpart CCC, Pickle Line 2 is considered a continuous pickle line.

(B) One (1) acidless metal cleaning line, identified as AMC, approved for construction in 2007, located on Pickle Line 2, with a maximum throughput capacity of 250 tons of steel per hour, using continuous abrasive blasting to remove scale from steel coil, with a maximum blast rate of 272,160 pounds of steel grit/shot per hour, with particulate emissions controlled by a baghouse, and exhausting to stack S-AMC.

(3) The tank farm treats the rinse water from Pickle Line 1 and Pickle Line 2. These tanks also store spent acid, raw acid, regenerated acid, oily wastewater treated waters for reuse, treatment process wastewater, and other process and treated waters.

Under 40 CFR Part 63, Subpart CCC, the tanks that store virgin or regenerated hydrochloric acid are considered new hydrochloric acid storage vessels.

D.17 – COLD MILL – COLD REVERSING MILL 1 AND COLD MILL BOILER (CMB #1)

(y) Cold Reversing Mill 1, identified as EU-09, constructed in 1988, with a maximum capacity of 250 tons/hour. Emulsion oil is sprayed on the strip, controlled by hoods mounted on both sides of the mill stand and exhausting, through collision mist eliminators at a design flow rate of 84,000 acf/min and 0.01 gr/dscf, to stack S-32.

(z) One (1) natural gas fueled Cold Mill Boiler, identified as CMB#1, constructed in 1988, with a heat input capacity of 34 MMBtu per hour, with emissions uncontrolled and exhausting to stack S-19. The boiler uses propane as a backup fuel.

Under 40 CFR Part 60, Subpart Dc, this unit is considered a steam generating unit.

D.18 – COLD MILL – COLD MILL BOILER (CMB#2)

(aa) One (1) natural gas fueled Cold Mill Boiler (CMB #2), identified as EU-19, with a heat input capacity of 40 MMBtu per hour, with emissions exhausting to stack S-23. Propane is used as a back-up fuel. The Cold Mill Boiler (CMB #2) is approved for construction in 2007.

Under 40 CFR Part 60, Subpart Dc, this unit is considered a steam generating unit.

D.19 – COLD MILL – REVERSING AND TEMPERING (R/T) MILL

(bb) Reversing and Tempering (R/T) Mill, (previously known as Temper Mill), identified as EU-14, constructed in 1995, with a maximum capacity of 250 tons of steel per hour, with emulsion oil sprayed on the strip, and controlled by hoods mounted on both sides of the mill stand and a fabric filter, exhausting through a panel-type collision mist eliminators to stack S-22. The panel-type collision mist eliminator has a design flow rate of 84,000 acf/min and an outlet grain loading of 0.01 gr/dscf. Note: This mill can reverse and temper. The mist eliminators operate as controls only when the mill is operating as a cold reversing mill.

D.20 – COLD MILL – ALKALINE CLEANING STATION

(cc) Alkali Cleaning at the Galvanizing line with mist eliminator as control. Emissions are exhausted to stack #510. The Alkaline Cleaning Station has a capacity of 140 tons of steel per hour.

D.21 – COLD MILL – ANNEALING FURNACES

(dd1) Eighteen (18) natural gas-fueled batch Annealing Furnaces, identified as EU-03, constructed in 2001. Each has a heat input capacity of 4.8 MMBtu per hour and a maximum throughput capacity of 200 tons of steel per hour. Emissions are uncontrolled and exhaust to roof vent (S-26).

(dd2) One (1) natural gas-fired annealing furnace, identified as AN-19, approved for construction in 2007, with a heat input capacity of 4.8 MMBtu per hour and a maximum throughput capacity of 200 tons of steel per hour, using propane as a backup fuel, with uncontrolled emissions exhausting to roof vent (S-26).

D.22 – INSIGNIFICANT ACTIVITIES – COLD MILL – QUALITY CONTROL/REWIND INSPECTION LINE (See Condition A.4)

D.23 – COLD MILL – ACID REGENERATION

(ee) Acid Regeneration system, identified as EU-04, constructed in 1989, consisting of two natural gas fueled tangentially fired burners with a maximum rating of 5.6 MMBtu per hour, and an absorber and cyclone with emissions controlled by its own counter flow packed scrubber (identified as AR scrubber) with mist eliminator exhausting to stack S-31. The counter flow-packed scrubber has a design flow rate of 4,269 acf/min and loading of 0.04 gr/dscf. Propane is used as back up fuel.

Under 40 CFR Part 63, Subpart CCC, this unit is considered an existing acid regeneration plant.

D.24 – COLD MILL – GALVANIZING LINE

(ff) Thirty six (36) Main Burners, identified as PHB #1 – PHB #36, constructed in 1992, and modified in 2002, input capacity of 1.622 MMBtu per hour each, and three (3) Auxiliary Burners, each with a heat input capacity of 0.1 MMBtu per hour in the preheat furnace section of the galvanizing line using natural gas rated at maximum total capacity of 58.7 MMBtu per hour. The main burners exhaust to stack S-27. The three (3) Auxiliary Burners exhaust to the atmosphere. The NOx emissions are controlled by a Selective Catalytic Reduction/Selective Non-Catalytic Reduction (SCR/SNCR) Systems. Exhausts to roof ventilation. The galvanizing line has an electric static oiler. A continuous emissions monitor (CEM) is used to monitor NOx emissions.

(gg) Additional burners as follows:

(1) Forty four (44) Burners, identified as RB#1 – RB#44, constructed in 2002, each with a heat input capacity of 0.323 MMBtu per hour in radiant tube section with a maximum total capacity of 14.2 MMBtu per hour and option to replace non-conforming burners. The NOx emissions are controlled by SCR System. Exhausts to stack S-27. The SCR/SNCR and SCR systems shall be referred to collectively as the SCR/SNCR system.

(2) One (1) auxiliary burner with a maximum heat input of 3.2 MMBtu/hr in the Alkaline Cleaning Section. The burner is natural gas fired and use propane as backup.

(3) Two (2) auxiliary burners with a maximum heat input of 1.5 MMBtu/hr each in the Strip Dryer Section. The burners are natural gas fired and use propane as backup.

(4) Four (4) auxiliary burners with a maximum heat input of 0.052 MMBtu/hr each in the Pot Roll Heater. The burners are natural gas fired and use propane as backup.

(5) Two (2) emergency burners with a maximum heat input of 0.58 MMBtu/hr each in the Zinc Pot Section. The burners are natural gas fired and use propane as backup.

(6) Two (2) auxiliary burners with a maximum heat input of 0.013 MMBtu/hr each in the Preheat open end burners section. The burners are natural gas fired and use propane as backup.

The SCR/SNCR and SCR systems shall be referred to collectively as the SCR/SNCR system.

(hh) One (1) Zinc Coating pot, identified as ZP#1, constructed in 1992, with a maximum capacity of 140 tons of steel per hour, uncontrolled and exhausting to the atmosphere.

D.25 – INSIGNIFICANT ACTIVITIES – WELDING (See Condition A.4)

D.26 – INSIGNIFICANT ACTIVITIES – MISCELLANEOUS SHEARS, SIDE TRIMMERS, AND SCRAP CUTTING (See Condition A.4)

D.27 – HOT STRIP MILL & TUNNEL FURNACE SYSTEM

(ii) The Hot Strip Mill, identified as HSM, constructed in 1989, with a maximum capacity of 502 tons/hour consisting of various rolling mill processes: Shearing, Descaling, Finishing, Rollout Table, Coilers, Skin Pass Mill and Roll Grinders. Parts of the Hot Mill Strip are controlled by water roll cooling.

(jj) Tunnel Furnace System, identified as EU-02, constructed in 1989, with a maximum capacity of 502 tons/hour, with a maximum total heat input capacity of 200 MMBtu per hour, emissions uncontrolled, tunnel furnace 1 exhausts to stack S13 and S14, tunnel furnace 2 exhausts to stack S15, and consisting of:

(1) Tunnel Furnace 1 – Natural gas fired with a heat input capacity of 84 MMBtu per hour. Tunnel Furnace 1 was constructed in 1989 as part of the original Tunnel Furnace System.

(2) Tunnel Furnace 2 – Natural gas fired with a heat input capacity of 84 MMBtu per hour. Tunnel Furnace 2 was constructed in 1994.

(3) Shuttle Furnaces 1 and 2 – Natural gas fired with a heat input capacity of 13 MMBtu per hour each using low NOx burners. Shuttle Furnaces 1 and 2 were constructed in 1994 and approved for a burner replacement in 2008.

(4) Snub Furnace – Natural gas fired with a heat input capacity of 6 MMBtu per hour. The snub furnace was constructed in 1989 and modified in 1994.

D.28 – HOT STRIP MILL – ANNEALING FURNACES

(kk) Four (4) natural gas-fired annealing furnaces using propane as a backup fuel, identified as HM #1-HM #4, each with a maximum heat input capacity of 14.505 MMBtu per hour. Emissions are controlled by low NOx burners and exhaust to the atmosphere. HM#1 and HM#2 were installed in 2006. HM#3 and HM#4 were not installed yet.

D.29 – INSIGNIFICANT ACTIVITIES – DEGREASING (See Condition A.4)

D.30 – MELT SHOP – MATERIAL TRANSFER STATION

(ll) Material transfer station #1, located inside the building exhausting to general ventilation, which will service both the EAFs and the LMFs, used to transfer various types and grades of lime, carbon, foamy slag, scrap, scrap substitutes, and other alloys from rail cars. Railcars are unloaded to trucks, silos, or the meltshop alloy handling system. Identified as MT #1, constructed in 2003, and consisting of:

(1) Rail car bottom unloading through a rubber boot to a conveyor with emissions uncontrolled.

(2) One (1) totally enclosed conveyor, identified as MTC, constructed in 2003, with emissions controlled by a bin vent dust collector and exhausting to stack S-45.

(3) One (1) loading spout connected to the load truck with emissions uncontrolled.

(mm) Material transfer station #2, located outside the building and exhausting to the atmosphere, which services the EAFs and the LMFs, used to transfer various types and grades of lime, carbon, foamy slag, scrap, scrap substitutes, and other alloys from rail cars. Railcars are unloaded to trucks, silos, or the meltshop alloy handling system. Identified as MT #2, constructed in 2006, and consisting of:

(1) Ten (10) storage silos, each controlled by individual bin vent filters or the Meltshop EAF baghouses (1 and 2).

(2) One (1) rail unloading operation under a roof.

(3) One (1) truck dumping station enclosed by a three sided building.

(4) One (1) loader dumping station enclosed by a three sided building.

(5) Associated enclosed conveyors.

(6) Storage bins.

(7) Misc. feed equipment and controls.

D.31 – MELTSHOP– ELECTRIC ARC FURNACES, ARGON OXYGEN DECARBURIZATION (AOD) VESSELS, DESULFURIZATION, CONTINUOUS CASTERS, EAF DUST TREATMENT FACILITY

(nn) Two (2) Meltshop Electric Arc Furnaces (EAFs), identified as EAF #1 and EAF #2, constructed in 1989 and approved for modification in 2007 to replace the furnace bottoms. EAF #1 consists of three (3) co-jet oxyfuel burner/lance, each has a rated capacity of

6 megawatt constructed in 1989, and one (1) co-jet oxyfuel burner/lance, with rated capacity of 10 megawatt using oxygen, natural gas and propane as backup fuels, approved for construction in 2007. EAF #2 consists of three (3) co-jet oxyfuel burner/lance, each has a rated capacity of 6 megawatt constructed in 1989, and one (1) co-jet oxyfuel burner/lance, with rated capacity of 10 megawatt using oxygen, natural gas and propane as backup fuels, approved for construction in 2007. EAF #1 consists of three (3) carbon injectors with total maximum rated capacity of 1000 pounds per minute and EAF #2 consists of three (3) carbon injectors with total maximum rated capacity of 1000 pounds per minute constructed in 1989. Together the EAFs and the Argon Oxygen Decarburization (AOD) have a maximum capacity of 502 tons/hour, with emissions controlled by multi compartment reverse air type baghouses (identified as Meltshop EAF Baghouse1 and Meltshop EAF Baghouse2). In addition the EAFs have the following associated equipment:

(1) Seven (7) small charge buckets, five (5) buckets constructed in 1989 and two (2) charge buckets approved for construction in 2007.

(2) Three (3) additional large charge buckets used for single furnace charges on both EAFs, approved for construction in 2007.

(3) Twenty-five (25) EAFs ladles, twenty-one (21) constructed in 1989, four (4) ladles approved for construction in 2007.

(4) EAF charge handling currently utilizing two (2) overhead cranes with magnets and a conveyor to load charge buckets constructed in 1989 and approved for modification in 2007 with the addition of 2 new scrap cranes with magnetics, enhancement of existing cranes and/or magnetics, use of rail and/or truck dump and loader operations and the use of mobile cranes to load charge buckets in the scrap yard.

(5) Flux and alloy material handling system for direct feeding of alloys, lime, carbon, scrap substitutes and other related materials to the EAFs constructed in 1989 and approved for modification in 2007 with the addition of bulk loading of material to the system in a three-sided building.

Under 40 CFR Part 60, Subpart AAa, these units are considered electric arc furnaces.

(1) The EAFs also utilize the following technologies:

(A) A direct shell evacuation (DSE) control system (“a fourth hole duct”),

(B) An overhead roof exhaust system consisting of canopy hoods,

(C) Oxy fuel burners, and

(2) Each or any combination of the Meltshop EAFs and AOD can independently produce the maximum capacity of 502 tons/hour of steel. Each Meltshop EAF can operate concurrently or independently to achieve this maximum capacity.

(3) Both the Meltshop EAF Baghouse1 and Meltshop EAF Baghouse2 capture the emissions from the Meltshop EAFs, AOD vessel, Desulfurization, Meltshop Continuous Casters and other miscellaneous sources. Each Meltshop Baghouse can sufficiently control emissions independently. Each Meltshop EAF Baghouse serves as a back up control to the Meltshop LMFs.

(A) The Meltshop EAF Baghouse1 is a multi compartment positive pressure baghouse, has a design air flow rate of 1,527,960 actual cubic foot/min (acf/min) and an outlet PM loading of 0.0018 grains/dry standard cubic foot (gr/dscf). This Meltshop EAF Baghouse1 exhausts to a roof vent/monitor identified as vent BH1.

(B) The Meltshop EAF Baghouse2 is a multi compartment positive pressure baghouse, has a design flow rate of 915,000 dscf/min and 1,200,000 acf/min and an outlet PM loading of 0.0018 gr/dscf. This Meltshop EAF Baghouse2 exhausts to a stack identified as BH2.

(4) The fugitive emissions generated during the furnace operations are captured by the Meltshop Roof Canopies or contained within the Meltshop Building.

(5) The Meltshop roof monitors include exhausts from the ladle preheaters, ladle dryers, tundish preheaters, tundish dryers, ladle lancing station, tundish dumping, fugitive emissions from the LMFs, fugitive emissions from the Meltshop Casters and other Meltshop operations.

(oo) One (1) Argon oxygen decarburization (AOD) vessel, identified as AOD1, constructed in 1995, and approved for modification in 2007 with the addition of one (1) AOD vessel, identified as AOD2 with a capacity of 160 tons/hour, one (1) top lance for both AODs, rated at 300,000 cubic feet/hour of oxygen, and one (1) rebricking station. Together the AODs and the Meltshop EAFs have a total maximum capacity of 502 tons/hour, with emissions controlled by the Meltshop EAF Baghouse1 which exhausts to a roof vent/monitor identified as vent BH1, and Meltshop EAF Baghouse2 which exhausts to stack BH2. Only one (1) AOD vessel can operate at a time.

Under 40 CFR Part 60, Subpart AAa, these units are considered argon-oxygen decarburization vessels.

(pp) Desulfurization (DS) is an additional step in the Meltshop operations that remove sulfur. It has a maximum capacity of 502 tons of metal per hour.

(qq) Two (2) Meltshop Continuous Casters, identified as CC #1 and CC #2, CC #1 was constructed in 1989, CC #2 was constructed in 1994, with total maximum capacity of 502 tons/hour, with emissions controlled by the Meltshop EAF Baghouse1 identified as vent BH1 which exhausts to a roof vent/monitor or Meltshop EAF Baghouse2 which exhausts to stack BH2. The steam from the Meltshop Continuous Casters exhausts through stack S-11.

(rr) An EAF dust treatment facility, identified as DTF, constructed in 2004, with a capacity of 100,000 lb/hour, with emission control by bin vents for the silos, scrubber for dust treatment and baghouse for truck loading. Dust transfer will also occur inside the building.

Under 40 CFR Part 60, Subpart AAa, this unit is considered a dust handling system. Options for the dust transfer are:

(1) from silo to truck through a loading spout,

(2) from silo to railcar through a loading spout,

(3) From silo to truck through a loading spout to transfer to the existing Meltshop EAF Baghouses. Unloading from the truck at the existing Meltshop EAF Baghouses also occurs in the building, transferring the dust through augers and a bucket elevator to the existing silo. In this option, the existing EAF dust treatment will have a maximum capacity of 100,000 lb/hr.

(4) Treating dust at the new silo and transferring to a truck. No loading spout is necessary because the material is no longer dusty, as treated.

The EAF dust treatment facility consists of the following:

(A) One (1) lime storage silo, identified as HRE #1, constructed in 1999, with a maximum capacity of 109 tons, emissions controlled by a bin vent filter,

and exhausting to stack HR/E-2. Lime is pneumatically loaded to the silo at a maximum transfer rate of 40,000 pounds per hour.

(B) One (1) pugmill, identified as PM, constructed in 1999, with a maximum capacity of 100,000 pounds per hour, emissions controlled by one (1) cyclone in series with one (1) venturi scrubber, and exhausting to stack HR/E-1. Lime is transferred to the pugmill via a screw conveyor system at a maximum transfer rate of 5,100 pounds per hour and EAF dust is transferred to the pugmill via gravity through an enclosed cone bottom loading spout at a maximum transfer rate of 100,000 pounds per hour.

D.32 – MELTSHOP – LADLE METALLURGY FURNACES, PREHEATERS, AND DRYERS

(ss) Three (3) Meltshop Ladle Metallurgy Furnaces (LMFs)/Stirring Station, two (2) identified as EU-13 (a) and (b), constructed in 1988, and one (1) LMF identified as EU-13(c) approved for construction in 2007 with a maximum capacity of 502 tons/hour each and EU-13 (a) and (b) are controlled by a baghouse, identified as Meltshop LMF Baghouse, exhausting to stack S-13. The Meltshop LMF Baghouse has a design flow rate of 200,000 acf/min. The LMF baghouse was constructed in 1992. The LMF, EU-13(c) will be controlled by the EAFs baghouses which vent to stacks BH1 and BH2. In addition the LMFs have the following associated equipment:

(1a) Ladle Preheaters, identified as LP #1 - #5, uncontrolled and exhausting to stacks 7 and 8, consisting of:

(A) 3 units, identified as LP #1 - #3, constructed in 1989, each rated at 10 MMBtu per hour.

(B) 1 unit, identified as LP #4, constructed in 1994, rated at 7.5 MMBtu per hour.

(C) 1 unit, identified as LP #5, constructed in 1989, rated at 15 MMBtu per hour.

(1b) Ladle Preheaters, identified as LP #1a through LP #7a, consisting of:

(A) Three (3) natural gas-fired ladle preheaters, identified as LP #1a, LP #2a, and LP #3a, approved for construction in 2007, each with a heat input capacity of 10 MMBtu per hour, using propane as a backup fuel, with uncontrolled emissions exhausting to stacks 7 and 8.

(B) One (1) natural gas-fired AOD ladle preheater, identified as LP #4a, approved for construction in 2007, with a heat input capacity of 10 MMBtu per hour, using propane as a backup fuel, with uncontrolled emissions exhausting to stacks 7 and 8.

(C) One (1) natural gas-fired ladle preheater, identified as LP #5a, approved for construction in 2007, with a heat input capacity of 10 MMBtu per hour, using propane as a backup fuel, with uncontrolled emissions exhausting to stacks 7 and 8.

(D) One (1) natural gas-fired ladle preheater, identified as LP #6, approved for construction in 2006, with a heat input capacity of 12 MMBtu/hour, utilizing low-NOx burners, using propane as a backup fuel, with uncontrolled emissions exhausting to stacks 7 and 8.

(E) One (1) natural gas-fired ladle preheater/dryer, identified as LP #7a, approved for construction in 2007, with a heat input capacity of 10

MMBtu/hour, using propane as a backup fuel, with uncontrolled emissions exhausting to stacks 7 and 8.

(2a) Ladle Dryer, identified as LDS #1, constructed in 1989, consisting of a low NO_x natural gas fired burner, with a heat input capacity of 5 MMBtu per hour. Emissions are uncontrolled and exhausting to stack 12.

(2b) One (1) natural gas-fired Ladle Dryer, identified as LDS #1a, approved for construction in 2007, with a heat input capacity of 5 MMBtu per hour, using propane as a backup fuel, with uncontrolled emissions exhausting to stack S-12.

(3) Four (4) Tundish Preheaters, identified as TPH #1 - #4, constructed in 1995, consisting of 4 low NOx natural gas fired heaters, each with a heat input capacity of 6 MMBtu per hour, using propane as a backup fuel, with uncontrolled emissions exhausting to stack S-10. . Five (5) Tundish Preheaters, identified as TP1 - TP5, constructed in 1995, each with a heat input capacity of 6 MMBtu per hour, using propane as a backup fuel.

(4) Two (2) Tundish Dryout Stations, identified as TD #1 and TD #2. TD #1 was constructed in 1989, and TD#2 was constructed in 1990, each with a heat input capacity of 9 MMBtu per hour, using propane as a backup fuel, with uncontrolled emissions exhausting to stack S-10.

(5) Four (4) Tundish Nozzle Preheaters, identified as TNP #1- #4, constructed in 1995, consisting of a low NOx natural gas fired Preheaters, each with a heat input capacity of 0.8 MMBtu per hour, using propane as a backup fuel, with uncontrolled emissions exhausting to stack S-10.

(6) One (1) natural gas-fired tundish dryout station, identified as TD #3, approved for construction in 2007, with a maximum heat input capacity of 2.4 MMBtu per hour, using propane as a backup fuel, with uncontrolled emissions exhausting to stack S-10.

(7) Two (2) natural gas-fired mandrel dryers, identified as MD #1 and MD #2, approved for construction in 2007, each with a heat input capacity of 1.5 MMBtu per hour, using propane as a backup fuel, with uncontrolled emissions exhausting to stack S-10.

(8) Fifteen (15) belt conveyors and 20 weight hoppers, with a maximum throughput of 200 tons per hour, approved for construction in 2007. These conveyors will supply lime, carbon and alloys to the new LMF.

(9) Flux and alloy material handling system for direct feeding of alloys, lime, carbon, scrap substitutes and other related materials to the LMFs, constructed in 1988 and approved for modification in 2007 with the addition of a three-sided building for bulk loading of material to the system.

(D.33 – INSIGNIFICANT ACTIVITIES – MELTSHOP **(See Condition A.4)**

D.34 – INSIGNIFICANT ACTIVITIES – MISCELLANEOUS SILOS (See Condition A.4)

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

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

D.5 – INSIGNIFICANT ACTIVITIES – MISCELLANEOUS SILOS

(a) Raw materials handling/storage, including silos which contain the following materials:

(1) One (1) lime silo TFS-1.

(2) Baghouse #1 lime silo (HRE #1).

(3) One (1) Iron Oxide Silo (IOS #1).

(4) Three (3) Baghouse Dust Silos (BHS#1, BHS#2, BHS#3).

(5) One (1) Soda Ash Silo (SAS #1) (this will become the sand silo).

(6) One (1) Iron Carbide Silo #1 (no longer in service).

(7) One (1) Lime Silo (#1 SEAF).

(8) One (1) Lime Silo (#2 SEAF).

(9) One (1) Lime Silo (#3 NEAF).

(10) One (1) Lime Silo (#4 NEAF).

(11) One (1) Injection Carbon Silo #1.

(12) One (1) Injection Carbon Silo #2.

(13) One (1) Charge Carbon Silo #1.

(14) One (1) Charge Carbon Silo #2.

(15) Three (3) AOD alloy system silos (AOD#1, AOD#2, and AOD#3).

(16) Ten (10) Melt Shop Alloy Feed System silos (MS alloy #1, MS alloy #2, MS alloy #3, MS alloy #4, MS alloy #5, MS alloy #6, MS alloy #7, MS alloy #8, MS alloy #9, MS alloy #10).

D.6 – INSIGNIFICANT ACTIVITIES – CASTRIP – COILERS, COIL CUTTING, AND HOT ROLLING STAND

Activities with emissions equal to or less than the thresholds provided in 326 IAC 2-7-1(21):

(b) Two (2) coilers, identified as C-1 and C-2, constructed in 2002. Fugitive particulate emissions from this process are controlled by the application of water to the coilers and exhausting to the roof monitor S-21. These coil the steel strip from the continuous strip caster.

(c) Scrap coil cutting in the Castrip area, identified as CC-1, constructed in 2002, occurs on an as needed basis, controlled by the Castrip LMS Baghouse and exhausting to stack S-20.

(d) Two (2) hot rolling stands, identified as HRS #1 and HRS #2, constructed in 2002. These stands roll the steel strip from the continuous strip caster to the desired gauge. Fugitive particulate emissions controlled by the application of water to the steel strip, and exhausting to the LMS roof monitor identified as S-21.

D.10 – INSIGNIFICANT ACTIVITIES – PAVED AND UNPAVED ROADS

(e) Paved and unpaved roads and parking lots with public access. Transport on new and existing paved roadways and parking lots, unpaved roadways, and unpaved areas around existing raw material storage piles.

D. 13 – INSIGNIFICANT ACTIVITIES – SCRAP HANDLING AND PROCESSING

Activities with emissions equal to or less than the thresholds provided in 326 IAC 2-7-1(21):

(f) Scrap handling, processing and cutting of ferrous metals and scrap substitutes. These activities exhaust indoors to general ventilation which in turn exhausts to Meltshop EAF baghouses 1 and 2.

D.15 – INSIGNIFICANT ACTIVITIES – GASOLINE DISPENSING FACILITIES

(g) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles or other mobile equipment, having a storage capacity less than or equal to 10,500 gallons.

(1) Two (2) 10,000 gallon gasoline storage tanks, each handling less than 1,000 gallons per day.

(2) Two (2) 10,000 gallon diesel storage tanks, each handling less than 3,000 gallons per day.

(3) One (1) 1,000 gallon diesel storage tank handling less than 500 gallons per day.

D.22 – INSIGNIFICANT ACTIVITIES – COLD MILL – QUALITY CONTROL/REWIND INSPECTION LINE

Activities with emissions equal to or less than the thresholds provided in 326 IAC 2-7-1(21):

(h) The unwinding and rewinding of steel coil for quality control inspections.

D.25 – INSIGNIFICANT ACTIVITIES – WELDING

(i) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment including the galvanizing line welder.

(j) Structural steel and bridge fabrication activities using 80 tons or less of welding consumables.

D.26 – INSIGNIFICANT ACTIVITIES – MISCELLANEOUS SHEARS AND SIDE TRIMMERS

Activities with emissions equal to or less than the thresholds provided in 326 IAC 2-7-1(21):

(k) Various shears located at various sites throughout the facility.

(l) Three (3) side trimmers in total. The side trimmers are located at the skin pass mill and at both pickle lines. Various side trimmers located at various sites throughout the facility.

D.29 – INSIGNIFICANT ACTIVITIES – DEGREASING

(m) Activities with emissions equal to or less than the thresholds provided in 326 IAC 2-7-1(21) consisting of: Degreasing operations, identified as DG, with a maximum throughput greater than 145 gallons per 12 months, uncontrolled and exhausting to the atmosphere.

D.33 – INSIGNIFICANT ACTIVITIES – MELTSHOP

(n) Activities with emissions equal to or less than the thresholds provided in 326 IAC 2-7-1(21):

(1) Ladle tap hole cleaning and repair.

(2) Ladle/tundish refractory application and curing.

(3) Tundish dumping.

(4) Ladle dumping.

(5) Ladle/tundish refractory loading and removal.

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source 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)] [13-15-3-6(a)]

(a) This permit, T107-7172-00038 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.

(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]

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 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.6 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.7 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.8 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) 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.9 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 a responsible official of truth, accuracy, and completeness. This certification shall state 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 attached Certification Form, 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 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 in physical form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance 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.11 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 ninety (90) days after issuance of this permit, including the following information for 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 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 certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(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 do not require the certification by the "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.12 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 Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865

Indianapolis Offices
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(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 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 certification by the “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.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.13 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 in 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.14 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 T107-7172-00038 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.

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 Data Section, 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 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 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 certification by the “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.17 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 certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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.

(b) 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 in writing by IDEM, OAQ, any additional information identified as being needed to process the application.

B.18 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application shall be certified by the "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.19 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 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.20 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
Permits 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, 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 emissions 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 the certification by the "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.

B.21 Source Modification Requirement [326 IAC 2-7-10.5] [326 IAC 2-2-2]

(a) A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

(b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2-2.

B.22 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.23 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
Permits Branch, 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 certification by the "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.24 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.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 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour, and the methods in 326 IAC 6-3-2(b) through (d) do not apply, shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 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 forty percent (40%) 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.3 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. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.4 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.

C.5 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). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on December 2004. The plan is included as Attachment A.

C.7 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 PM 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.8 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
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 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 by the "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 Accredited 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 Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.9 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 test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, 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 certification by the "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 certification by the "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.

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, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. 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 control, that equipment cannot be installed and operated within ninety (90) days, 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 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 certification by the “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 Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEMS) and related equipment.

(b) In the event that a breakdown of a continuous emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.

(c) Unless otherwise provided by a rule or in a D Section of this permit, whenever a continuous emission monitor other than an opacity monitor is malfunctioning or will be down for calibration, maintenance, or repairs for a period of four (4) hours or more, a calibrated backup CEMS shall be brought online within four (4) hours of shutdown of the primary CEMS, and shall be operated until such time as the primary CEMS is back in operation.

(d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 36 IAC 2-2.

C.13 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.14 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 have a scale such that the expected normal reading 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 pressure gauge or other 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.15 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 December 13, 1991.

(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 approved ERP for the appropriate episode level.
[326 IAC 1-5-3]

C.16 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.17 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) Upon detecting an excursion or exceedance, the Permittee shall 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 emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions 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 may include, but are not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned 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.

(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;

(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 maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.18 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 these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. 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 one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and 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 certification by the “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.19 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 certification by the "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.20 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 shall be implemented within ninety (90) days of permit issuance.

(c) If there is 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 Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee)) 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)) 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

(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 emissions 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 of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.21 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. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, 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 within thirty (30) days of the end of the reporting period. All reports do require the certification by the “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 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 (c) in Section C.20 (General Record Keeping Requirements) for any "project" (as defined in 326 IAC 2-2-1(qq), 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, 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).

(3) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:

(A) The name, address, and telephone number of the major stationary source.

(B) The annual emissions calculated in accordance with (c)(2) and (3) in Section C- General Record Keeping Requirements.

(C) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3).

(D) Any other information that the Permittee deems fit to include in this report,

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management
Air Compliance Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(g) 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.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

CASTRIP – VACUUM DEGASSER AND FLARE

(a) One (1) vacuum degasser with process gas lances, identified as V #1, constructed in 2004, to be modified in 2006, a maximum capacity of 270 tons of steel/hour, emissions controlled by a closed flare, and exhausting to Stack 500. This vacuum degasser removes entrained gases from the steel. Desulfurization and/or decarburization may also occur during the degassing process. The enclosed flare burner has a maximum heat input capacity of 2 MMBtu/hour, uses natural gas as its primary fuel with propane as back up fuel, and operates with a minimum temperature of 1,400 ^{o}F. The flare only operates when the vacuum degasser is in the degassing mode (i.e., when CO must be controlled).

(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 Vacuum Degasser PSD BACT Limits [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and PSD SSM 107-21359-00038, issued April 27, 2006, the Permittee shall comply with the following Best Available Control Technology (BACT) requirements:

(a) The carbon monoxide (CO) emissions from the vacuum degasser shall be controlled by a flare that uses natural gas as primary fuel, and propane as back up fuel.

(b) The carbon monoxide (CO) emissions from the vacuum degasser shall not exceed 0.075 pounds per ton of steel processed at the VTD, and 20.25 pounds per hour, based on a 3-hour block average.

(c) The sulfur dioxide (SO_2) emissions from the vacuum degasser shall not exceed 0.022 pounds per ton of steel processed at the VTD, and 5.4 pounds per hour, based on a 3-hour block average.

(d) The nitrogen oxides (NOx) emissions from the vacuum degasser shall not exceed 0.0055 pounds per ton of steel processed at the VTD, and 1.35 pounds per hour, based on a 3-hour block average.

(e) The volatile organic compound (VOC) emissions from the vacuum degasser shall not exceed 0.005 pounds per ton of steel processed at the VTD, and 1.35 pounds per hour, based on a 3-hour block average.

(f) The PM/PM_{10} (filterable plus condensable) emissions from the vacuum degasser shall not exceed 0.008 grain per dry standard cubic foot, and 0.45 pounds per hour, based on a 3-hour block average.

(g) The opacity from the vacuum degasser enclosed flare stack (Stack 500) shall not exceed three percent (3%) opacity, based on a six-minute average.

D.1.2 Operational Flexibility – PSD Requirements [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and PSD SSM 107-21359-00038, issued April 27, 2006, the Permittee may operate the vacuum degasser as follows:

(a) The gases can be removed from the steel after the steel has gone through the Castrip Ladle Metallurgical Station (LMS-2), or

(b) The gases can be removed from the steel before the steel goes through the Castrip Ladle Metallurgical Station (LMS-2), or

(c) The gases can be removed from the steel and the steel sent back to the Meltshop Continuous Casters for casting, or

(d) The steel may bypass the vacuum degassing process.

D.1.3 Flare PSD BACT Limits [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and PSD SSM 107-21359-00038, issued April 27, 2006, the Permittee shall comply with the following Best Available Control Technology (BACT) requirements:

(a) The 2 million British Thermal Unit per hour (MMBTU/hour) enclosed flare burner shall use natural gas as primary fuel and propane as back up fuel.

(b) The collateral nitrogen oxide (NO_x) emissions from the 2 MMBTU/hour flare burner shall not exceed 0.10 pounds per MMBTU. The NOx emissions from the 2 MMBTU/hour flare burner shall not exceed 0.005 pounds per ton of steel, and 0.675 pounds per hour, based on a 3-hour block average.

(c) The collateral sulfur dioxide (SO_2) emissions from the 2 MMBTU/hour flare burner shall not exceed 0.0006 pounds per MMBTU. The SO_2 emissions from the 2 MMBTU/hour flare burner shall not exceed 0.02 pounds per ton of steel, and 2.7 pounds per hour, based on a 3-hour block average.

(d) The collateral carbon monoxide (CO) emissions from the 2 MMBTU/hour flare burner shall not exceed 0.084 pounds per MMBTU. The CO emissions from the 2 MMBTU/hour flare burner shall not exceed 0.075 pounds per ton of steel, and 10.125 pounds per hour, based on a 3-hour block average.

(e) The collateral volatile organic compound (VOC) emissions from the 2 MMBTU/hour flare burner shall not exceed 0.0055 pounds per MMBTU. The VOC emissions from the 2 MMBTU/hour flare burner shall not exceed 0.005 pounds per ton of steel, and 0.675 pounds per hour, based on a 3-hour block average.

(f) The opacity from the vacuum degasser stack (500) shall not exceed three percent (3%) opacity based on a six-minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9). This limitation satisfies the opacity limitations required by 326 IAC 5-1 (Opacity Limitations).

(g) The collateral PM/PM_{10} (filterable plus condensable) emissions from the 2 MMBTU/hour flare burner shall not exceed 0.0076 pounds per MMBTU. The PM/PM_{10} emissions from the 2 MMBTU/hour flare burner shall not exceed 0.008 grain per dry standard cubic foot, and 0.45 pounds per hour, based on a 3-hour block average.

D.1.4 Preventive Maintenance Plan (PMP) [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan (PMP), in accordance with Section B - Preventive Maintenance Plan (PMP) of this permit, is required for the vacuum degasser and its associated control device, a flare.

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.1.5 Control Equipment Operation [326 IAC 2-2]

Pursuant to PSD SSM 107-21359-00038, issued April 27, 2006, the flare shall be in operation and control carbon monoxide (CO) emissions at all times when the vacuum degasser is in operation.

D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [326 IAC 2-2]

Pursuant to PSD SSM 107-21359-00038, issued April 27, 2006:

(a) Within 60 days after achieving the maximum production rate, but no later than 180 days after initial start-up of the vacuum degasser and enclosed flare, the Permittee shall perform carbon dioxide (CO) testing on stack 500 to show compliance with Conditions D.1.1(b) and D.1.3(d).

(b) These tests shall be performed using methods as approved by the Commissioner.

(c) Testing shall be conducted in accordance with Section C - Performance Testing.

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

D.1.7 Flare Operating Parameters [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) The flare for the carbon monoxide (CO) emissions reductions shall be operated with a flame present at all times when the vacuum degasser is in operation.

(b) The presence of a flare pilot flame shall be monitored using a thermocouple or any equivalent device to detect the presence of the flame.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.8 Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

(a) The Permittee shall maintain records required under 326 IAC 3-5-6 at the source in a manner that they may be inspected by the IDEM, OAQ, or the US EPA, if so requested or required.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

CASTRIP – LOW NOx BOILER

(b) One (1) natural gas fueled low-NO_x boiler, identified as Boiler ID No. 501, constructed in 2004, a heat input capacity of 71.04 MMBtu/hour, utilizing low-NOx burners, and exhausting to Stack 501. This boiler provides steam to the vacuum degasser. Propane will be used as back up fuel.

Under 40 CFR Part 60, Subpart Dc, this unit is considered a steam generating unit.

(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 Boiler ID No. 501 PSD BACT Limits [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and PSD SSM 107-21359-00038, issued April 27, 2006, the Permittee shall comply with the following Best Available Control Technology (BACT) requirements for Boiler ID No. 501:

(a) Boiler ID No. 501 shall use natural gas as primary fuel and propane as backup fuel.

(b) The nitrogen oxides (NO_x) emissions from Boiler ID No. 501 shall not exceed 0.035 pounds per MMBtu.

(c) The carbon monoxide (CO) emissions from Boiler ID No. 501 shall not exceed 0.061 pounds per MMBtu.

(d) The volatile organic compound (VOC) emissions from Boiler ID No. 501 shall not exceed 0.0026 pounds per MMBtu.

(e) The sulfur dioxide (SO_2) emissions from Boiler ID No. 501 shall not exceed 0.0006 pounds per MMBtu.

(f) The PM/PM_{10} (filterable and condensible) emissions from Boiler ID No. 501 shall not exceed 0.0076 pounds per MMBtu.

D.2.2 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4, the PM emissions from Boiler ID No. 501 shall be limited to 0.30 pounds per MMBtu heat input.

This limitation is based on the following equation:

$Pt = 1.09 / Q^{0.26}$ where Pt = Pounds of PM emitted per million Btu (lb/MMBtu) heat input, and

Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu per hour) heat input.
(Q = 34.0 + 15.0 + 9.0 + 9.98 + 71.0 = 139.02)

D.2.3 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 Boiler ID No. 501, except when otherwise specified in 40 CFR Part 60, Subpart Dc.

D.2.4 Preventive Maintenance Plan (PMP) [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan (PMP), in accordance with Section B – Preventive Maintenance Plan (PMP) of this permit, is required for Boiler ID No. 501.

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.2.5 Low NO_x Burners [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and PSD SSM 107-21359-00038, issued April 27, 2006, the Permittee shall equip and operate Boiler ID No. 501 with natural gas fueled low NO_x burners and perform good combustion practices.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.6 Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

(a) Pursuant to 40 CFR Part 60, Subpart Dc, the Permittee shall keep records of fuel used each calendar month by Boiler ID No. 501, including the types of fuel and amount used.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:
CASTRIP – PREHEATERS, DRYERS, AND ALLOY UNLOADING

(c) One (1) natural gas fueled ladle preheater, identified as LP-3, constructed in 2004, to be modified in 2006, a heat input capacity of 12 MMBtu/hour utilizing low NOx burners, emissions uncontrolled, and exhausting to a roof monitor (S-21, also identified as 105,106). Some emissions of this ladle preheater may also exhaust through the Castrip LMS Baghouse stack S-20. Propane will be used as back up fuel.

(d) Two (2) natural gas-fired ladle preheaters, identified as LP-1 and LP-2, and one (1) natural gas-fired ladle dryer identified as LD-1, each constructed in 2002, to be modified in 2006, a heat input capacity of 12 MMBtu/hour each, utilizing low-NOx burners, and the capability to utilize propane as a backup fuel. The preheaters exhaust to roof monitor S-21. The ladle dryer exhausts to baghouse stack S-20.

(e) Two (2) natural gas-fired tundish preheaters, identified as TP-1 and TP-2, constructed in 2002, to be modified in 2006, a heat input capacity of 10 MMBtu per hour each, utilizing oxy-fuel burners, and have the capability to utilize propane as a backup fuel. Emissions exhaust to LMS baghouse stack S-20.

(f) Two (2) natural gas-fired tundish nozzle preheaters identified as TNP-1 and TNP-2, to be modified in 2006. Each tundish nozzle preheater shall be equipped with low-NOx burners, shall not exceed a maximum heat input rate of 2 MMBtu per hour, and has the capability to utilize propane as a backup fuel. Combustion emissions exhaust to the LMS baghouse stack identified as S-20.

(g) Three (3) natural gas-fired tundish dryers, identified as TD-1, TD-2, and TD-3, constructed in 2002, to be modified in 2006, with a maximum heat input capacity of 4 MMBtu per hour, 3 MMBtu per hour, and 1 MMBtu per hour, respectively, utilizing low-NOx burners, and having the capability to utilize propane as a backup fuel. Emissions exhaust to roof monitor S-21.

(h) Two (2) natural gas-fired transition piece preheaters, identified as TPP-3 and TPP-4, and two (2) natural gas-fired transition piece dryers, identified as TPD-1 and TPD-2, constructed in 2002, to be modified in 2006. The two (2) transition piece preheaters have a heat input capacity of 2 MMBtu per hour each for a combined total capacity of 4.0 MMBtu per hour, the two (2) transition piece dryers have heat input capacity of 0.15 MMBtu per hour each, utilizing low-NOx burners. The preheaters exhaust to baghouse stack S-20. The dryers exhaust to roof monitor S-21. The preheaters are used in the tundish operation located on the caster deck. The transition piece preheaters and transition piece dryers utilize propane as a backup fuel.

(i) Associated VTD alloy unloading, storage and feed systems, identified as AU-2, constructed in 2005, and consisting of:

(1) One (1) alloy truck dump station.
(2) Truck unloading/conveyors.
(3) Storage hoppers, all exhausting to a common bin vent, rated at 0.01 grains per dry standard cubic foot, into the building.

Alloy unloading is performed in a 3-sided building along the side of the existing Castrip building. Emissions exhaust to the atmosphere.

(j) Dumping, storage, and transfer operations of alloy raw materials for the strip caster plant, identified as AU-1 and constructed in 2002.

(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 Nitrogen Oxides (NO_X) Emission Limitations

(a) Pursuant to 326 IAC 2-2 and PSD SSM 107-21359-00038, issued April 27, 2006, the small combustion units consisting of ladle preheaters LP-1, LP-2, and LP-3, tundish dryers TD-1, TD-2, and TD-3, and the transition piece dryers TPD-1 and TPD-2, shall comply with the following requirements:

(1) Each combustion facility shall utilize "good combustion practices", utilize "pipeline quality" natural gas as the primary fuel and may utilize propane as a backup fuel; and

(2) The following combustion facilities shall vent to S-21 roof monitor:

Combustion Facility	No. Units	Each Unit's Max Heat Input Rate (MMBtu/hr)	Burner Type (or equivalent)	Stack
Ladle Preheaters LP-1, LP-2, and LP-3	4	12	Low-NOx	S-21
Tundish Dryer TD-1	1	4	Low-NOx	S-21
Tundish Dryer TD-2	1	3	Low-NOx	S-21
Tundish Dryer TD-3	1	1	Low-NOx	S-21
Transition Piece Dryers TPD-1 and TPD-2	2	0.15	Low-NOx	S-21

(b) Pursuant to 326 IAC 2-2-3 (PSD BACT) and PSD SSM 107-21359-00038, issued April 27, 2006, the BACT for NOx from the tundish dryers identified as TD-1, TD-2, TD-3, and each transition piece dryer identified as TPD-1 and TPD-2 shall be proper equipment operation, the use of low NOx burners, and NOx emission rate shall not exceed an emission rate of 0.10 pounds per MMBtu. Further, the hourly NOx emission rate shall not exceed 0.40, 0.30, and 0.10 lbs per hour for emission units TD-1, TD-2, and TD-3, respectively, and the hourly NOx emission rate shall not exceed 0.015 lbs per hour for each transition piece dryer identified as TPD-1 and TPD-2.

(c) Pursuant to 326 IAC 2-2-3 (PSD BACT) and PSD SSM 107-21359-00038, issued April 27, 2006, the BACT for NOx from each ladle preheater identified as LP-1, LP-2, and LP-3 shall be proper operation and shall not exceed a NOx emission rate of 0.10 pounds per MMBtu and 1.2 lbs per hour.

D.3.2 Sulfur Dioxide (SO_2) Emission Limitations

Pursuant to 326 IAC 2-2 and PSD SSM 107-21359-00038, issued April 27, 2006, the combustion units specified in Condition D.3.1(a) shall utilize "good combustion practices", utilize "pipeline quality" natural gas as the primary fuel and may utilize propane as a backup fuel. The combustion units shall comply with the following requirements:

(a) BACT for SO_2 from the tundish dryers identified as TD-1, TD-2, and TD-3 and each transition piece dryer identified as TPD-1 and TPD-2 shall be proper operation and shall not exceed a SO_2 emission rate of 0.0006 pounds per MMBtu. Further, the hourly SO_2 emission rate shall not exceed 0.0024, 0.0018, and 0.0006 lbs per hour for emission units TD-1, TD-2, and TD-3, respectively, and the hourly SO_2 emission rate shall not exceed 0.0001 lbs per hour for each transition piece dryer identified as TPD-1 and TPD-2.

(b) BACT for SO_2 from each ladle preheater identified as LP-1, LP-2, and LP-3 shall be proper operation and shall not exceed a SO_2 emission rate of 0.0006 pounds per MMBtu and 0.007 lbs per hour.

D.3.3 Carbon Monoxide (CO) Emission Limitations

Pursuant to 326 IAC 2-2 and PSD SSM 107-21359-00038, issued April 27, 2006, the combustion units specified in Condition D.3.1(a) shall utilize “good combustion practices”, utilize “pipeline quality” natural gas as the primary fuel and may utilize propane as a backup fuel, and comply with the following requirements:

(a) BACT for CO from the tundish dryers identified as TD-1, TD-2, and TD-3 and each transition piece dryer identified as TPD-1 and TPD-2 shall be proper operation and shall not exceed a CO emission rate of 0.084 pounds per MMBtu. Further, the hourly CO emission rate shall not exceed 0.336, 0.252, and 0.084 lbs per hour for emission units TD-1, TD-2, and TD-3, respectively, and the hourly CO emission rate shall not exceed 0.013 lbs per hour for each transition piece dryer identified as TPD-1 and TPD-2.

(b) BACT for CO from each ladle preheater identified as LP-1, LP-2, and LP-3 shall be proper operation and shall not exceed a CO emission rate of 0.084 pounds per MMBtu and 1.01 lbs per hour.

D.3.4 Particulate Matter (PM/PM10) Emission Limitations

Pursuant to 326 IAC 2-2 and PSD SSM 107-21359-00038, issued April 27, 2006, the combustion units specified in Condition D.3.1(a) shall utilize proper operation, utilize “pipeline quality” natural gas as the primary fuel, and may utilize propane as a backup fuel, and shall comply with the following requirements:

(a) BACT for PM/PM10 (filterable plus condensable) from the tundish dryers identified as TD-1, TD-2, TD-3 and each transition piece dryer identified as TPD-1 and TPD-2 shall be utilization of “good combustion practices” and shall not exceed a PM/PM10 (filterable plus condensable) emission rate of 0.0076 pounds per MMBtu. Further, the hourly PM/PM10 (filterable plus condensable) emission rate shall not exceed 0.030, 0.023, and 0.008 lbs per hour for emission units TD-1, TD-2, and TD-3, respectively, and the hourly PM/PM10 (filterable plus condensable) emission rate shall not exceed 0.0011 lbs per hour for each transition piece dryer identified as TPD-1 and TPD-2.

(b) BACT for PM/PM10 (filterable plus condensable) from each ladle preheater identified as LP-1, LP-2, and LP-3 shall be utilization of “good combustion practices” and shall not exceed a PM/PM10 (filterable plus condensable) emission rate of 0.0076 pounds per MMBtu and 0.091 lbs per hour.

(c) The opacity from the LMS-2 roof monitor (S-21) shall not exceed three percent (3%) opacity based on a six-minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9). Compliance with this limitation satisfies the opacity limitations required by 326 IAC 5-1 (Opacity Limitations).

D.3.5 Volatile Organic Compounds (VOC) Emission Limitations

Pursuant to 326 IAC 2-2 and PSD SSM 107-21359-00038, issued April 27, 2006, the combustion units specified in Condition D.3.1(a) shall utilize “good combustion practices”, utilize “pipeline quality” natural gas as the primary fuel and may utilize propane as a backup fuel, and comply with the following requirements:

(a) BACT for VOC from the tundish dryers identified as TD-1, TD-2, and TD-3 and each transition piece dryer identified as TPD-1 and TPD-2 shall be proper operation and shall not exceed a VOC emission rate of 0.0054 pounds per MMBtu. Further, the hourly VOC emission rate shall not exceed 0.011, 0.016, and 0.005 lbs per hour for emission units TD-1, TD-2, and TD-3, respectively, and the hourly VOC emission rate shall not exceed 0.0035 lbs per hour for each transition piece dryer identified as TPD-1 and TPD-2.

(b) BACT for VOC from each ladle preheater identified as LP-1, LP-2, and LP-3 shall be proper operation and shall not exceed a VOC emission rate of 0.0054 pounds per MMBtu and 0.065 lbs per hour.

D.3.6 Nitrogen Oxide (NOx) Emission Limitation [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and PSD SSM 107-21359-00038, issued April 27, 2006, the combustion units consisting of ladle dryer LD-1, tundish preheaters TP-1 and TP-2, transition piece preheaters TPP-3 and TPP-4, and tundish nozzle preheaters TNP-1 and TNP-2, shall comply with the following requirements:

(a) Each combustion facility shall utilize “good combustion practices”, utilize “pipeline quality” natural gas as the primary fuel and may utilize propane as a backup fuel; and

(b) The following combustion facilities shall vent to LMS-2 Baghouse stack S-20:

Combustion Facility	No. Units	Each Unit’s Max Heat Input Rate (MMBtu/hr)	Burner Type (or equivalent)	Stack
Ladle Dryer LD-1	1	12	Low-NOx	S-20
Tundish Preheaters TP-1 and TP-2	2	10	Oxy-Fuel	S-20
Transition Piece Preheaters TPP-3 and TPP-4	2	2	Low-NOx	S-20
Tundish Nozzle Preheaters TNP-1 and TNP-2	2	2	Low-NOx	S-20

D.3.7 VTD Alloy Handling PSD BACT [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and PSD SSM 107-21359-00038, issued April 27, 2006, the following BACT requirements apply to the VTD alloy unloading operations AU-2:

(a) The Permittee shall perform alloy unloading in a 3-sided building.

(b) The visible emissions from the alloy unloading shall not exceed 3% opacity, based on a 6-minute average.

(c) Except as otherwise provided by statute, rule, or this permit, the VTD material handling system bin vent filters for PM control shall be in operation and control emissions at all times the associated equipment controlled by the filters are in operation.

(d) In the event that filter failure is observed in a multi-compartment filter housing, 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 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.3.8 Dumping, Storage, and Transfer Operations PSD BACT [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and PSD SSM 107-21359-00038, issued April 27, 2006, the emissions from dumping, storage, and transfer operations of raw materials identified as AU-1 shall not exceed five percent (5%) opacity based on a six-minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9). This limitation satisfies the opacity limitations required by 326 IAC 5.1 (Opacity Limitations).

D 3.9 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate emissions from alloy handling and dumping, storage, and transfer operations (AU-1 and AU-2) shall not exceed the pound per hour emission rates established as E in the following formulas:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the following equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour, and
P = process weight rate in tons per hour

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} – 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.10 Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

(a) The Permittee shall maintain records of all vendor guarantees for all combustion units listed in this section to demonstrate compliance with Condition D.3.2.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

CASTRIP – LMS, TUNDISH, AND CONTINUOUS STRIP CASTER

(k) A strip caster line rated at a maximum steel production rate of 270 tons per hour consisting of:

(1) One (1) ladle metallurgy station, identified as LMS-2, constructed in 2002, to be modified in 2006, and maximum production capacity of 270 tons of steel per hour, and emissions captured by a side draft hood that has a PM capture efficiency of 99 percent and controlled by the LMS-2 baghouse, and exhausting to the LMS-2 baghouse stack identified as S-20. The remaining uncontrolled emissions shall be exhausted through the LMS-2 roof monitor identified as S-21. The LMS-2 baghouse has an enclosed dust handling system or equivalent for material recovery and particulate matter control.

(2) Tundishes, identified as T-1, constructed in 2002, to be modified in 2006, with a maximum production capacity of 270 tons of steel per hour. The two (2) natural gas-fired tundish preheaters, identified as TP-1 and TP-2 and the three (3) natural gas-fired tundish dryers, identified as TD-1, TD-2 and TD-3, supply heat to the tundish. Only one (1) tundish may be operated at a given time. The tundish in operation feeds the molten metal from the LMS-2 ladle to one (1) continuous strip caster identified as CS-1.

(3) One (1) continuous strip caster, identified as CS-1, constructed in 2002, to be modified in 2006, a maximum capacity of 270 tons of steel per hour, and emissions captured by a canopy hood that has a PM capture efficiency of 98 percent. The captured PM in the gas stream shall be controlled by the LMS-2 baghouse and the gas stream shall be exhausted though the LMS-2 baghouse stack identified as S-20. The remaining uncontrolled emissions shall be exhausted through the LMS-2 roof monitor identified as S-21.

(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 Particulate PSD BACT [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements) and PSD SSM 107-21359-00038, issued April 27, 2006, the strip caster line (consisting of units LMS-2, T-1 and CS-1) shall comply with the following BACT requirements.

(a) The ladles associated with strip caster CS-1 shall be covered with lids which shall be closed at all times when transporting molten metal in the ladles, in order to minimize uncontrolled emissions.

(b) Ladle Metallurgy Station LMS-2 shall be equipped with a side draft hood that evacuates particulate fumes from the LMS-2 to the LMS-2 baghouse. The side draft hood shall have a minimum capture efficiency of 99 percent.

(c) Tundish T-1 and continuous strip caster CS-1 shall be controlled by a canopy hood that evacuates particulate fumes to the LMS-2 baghouse. The hood shall have a minimum capture efficiency of at least 98 percent.

(d) The filterable PM/PM_{10} emissions from the LMS-2 baghouse shall not exceed 0.0117 pounds of filterable PM/PM_{10} per ton of steel processed at the LMS-2 and 0.0018 grains per dry standard cubic feet (gr/dscf) at a maximum volumetric air flow rate of 200,000 dry standard cubic feet per minute.

(e) The filterable and condensable PM/PM_{10} emissions from the LMS-2 baghouse shall not exceed 0.0338 pounds of filterable and condensable PM/PM_{10} per ton of steel processed at the LMS-2 and 0.0052 gr/dscf at a maximum volumetric air flow rate of 200,000 dry standard cubic feet per minute.

(f) The opacity from the LMS-2 baghouse stack (S-20) shall not exceed three percent (3%) opacity based on a six-minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9) when emitted from any baghouse, roof monitor or building opening. This limitation satisfies the opacity limitations required by 326 IAC 5-1 (Opacity Limitations).

(g) Except as otherwise provided by statute, rule, or this permit, the baghouses for PM control shall be in operation and control emissions at all times the associated equipment controlled by the baghouse are in operation.

(h) 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 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.4.2 Nitrogen Oxide (NOx) PSD BACT [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements) and PSD SSM 107-21359-00038, issued April 27, 2006, the total emissions from the Castrip LMS-2 baghouse stack (S-20) shall not exceed 0.19 pounds of NOx per ton of steel processed at the LMS-2.

D.4.3 Carbon Monoxide (CO) PSD BACT [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements) and PSD SSM 107-21359-00038, issued April 27, 2006, the total emissions from the Castrip LMS-2 baghouse stack (S-20) shall not exceed 0.141 pound of CO per ton of steel processed at the LMS-2.

D.4.4 Sulfur Dioxide (SO2) PSD BACT [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements) and PSD SSM 107-21359-00038, issued April 27, 2006, the total emissions from the Castrip LMS-2 baghouse stack (S-20) shall not exceed 0.210 pounds SO_2 per ton of steel processed at the LMS-2.

D.4.5 PSD BACT for Metals [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements), and PSD SSM 107-24348-00038, the Permittee shall comply with the following BACT requirements:

(a) The Lead emissions from the Castrip, CS-1 shall be limited to 0.00048 pound per ton of steel produced and 0.13 pound per hour, based on a 3-hour block average.

(b) The Mercury emissions from the Castrip, CS-1 shall be limited to 0.02 pound per hour, based on a 3-hour block average.

(c) The Beryllium emissions from the Castrip, CS-1 shall be limited to 0.002 pound per hour, based on a 3-hour block average.

(d) The Fluorides emissions from the Castrip, CS-1 shall be limited to 0.01 pound per ton of steel produced and 2.7 pounds per hour, based on a 3-hour block average.

The fluorides emissions from the Castrip shall be minimized by using granular Fluorspar, to minimize fluorides emissions and it shall be applied at a rate of 250 pounds/heat at the Castrip.

(e) The emissions from the lead and mercury shall be minimized in accordance with the Scrap Management Program (SMP) and

(f) The emissions from the Castrip shall be controlled by a baghouse.

D.4.6 Operation Limitations [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements), and PSD SSM 107-21359-00038, issued April 27, 2006, the strip caster line shall not exceed a maximum steel throughput of 2,365,200 tons per twelve (12) consecutive month period. The Permittee shall demonstrate compliance with these steel processing limits based on a consecutive twelve (12) month period.

D.4.7 Preventive Maintenance Plan

A Preventive Maintenance Plan (PMP), in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the LMS-2 and continuous strip caster CS-1 and the particulate capture and control systems associated with LMS-2 and CS-1.

Compliance Determination and Monitoring

D.4.8 Performance Testing [326 IAC 2-2] [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) Pursuant to 326 IAC 2-1.1-11, 326 IAC 2-2, and PSD SSM 107-21359-00038, issued April 27, 2006, the Permittee shall perform PM/PM_{10} (filterable and condensable), NOx, CO, and SO_2, compliance stack tests for the LMS-2 baghouse stack (S-20) within one hundred eighty (180) days of April 27, 2006.

(b) Pursuant to 326 IAC 2-1.1-11 and 326 IAC 2-2, the Permittee shall perform opacity compliance stack tests for the LMS-2 baghouse stack (S-20) within one hundred eighty (180) days of April 27, 2006.

(c) Opacity tests shall be performed concurrently with the particulate compliance stack test for the LMS-2 baghouse stack, unless meteorological conditions require rescheduling the opacity tests to another date.

(d) Within sixty (60) days but no later than one hundred and eighty (180) days after the initial start up of the modified EAF operation in Section D.31 and the new LMF in Section D.32 in this PSD/SSM NO. 107-24348-00038, the Permittee shall perform a compliance test on the LMS-2 baghouse controlling the Castrip for Lead, Mercury, Beryllium and Fluorides, in order to comply with Condition D.4.5.

(e) All compliance stack tests shall be repeated at least once every 2.5 years from the date of a valid compliance demonstration.

IDEM, OAQ retains the authority under 326 IAC 2-1-4(f) to require the Permittee to perform additional and future compliance testing as necessary. Testing shall be conducted in accordance with Section C – Performance Testing requirements.

D.4.9 Visible Emissions Notations

(a) Visible emission notations of the LMS-2 baghouse stack exhaust 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 steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

D.4.10 Baghouse Parametric Monitoring

(a) The Permittee shall record the pressure drop across the LMS-2 baghouse used in conjunction with LMS-2 or CS-1, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 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. 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 from 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, and shall be calibrated at least once annually.

(b) The Permittee shall record the fan amperes of LMS baghouse fan at least once per day when the associated LMS or continuous strip caster is in operation. Unless operated under conditions for which Section C - Response to Excursions or Exceedances specifies otherwise, the fan amperes of the capture and control system shall be maintained within plus or minus 15% of the rate established during the most recent compliant stack test. Section C - Response to Excursions or Exceedances for this unit shall contain troubleshooting contingency and response steps for when the fan amperes are more than 15% above or below the above-mentioned rate for any one reading. 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 fan amperes 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 annually.

D.4.11 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 unit has 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 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).

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.4.12 Record Keeping Requirements

(a) To document compliance with Condition D.4.9, the Permittee shall maintain records of visible emission notations of the LMS baghouse stack exhaust once per day. 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).

(b) To document compliance with Condition D.4.10(a), the Permittee shall maintain once per day records of the total static pressure drop during normal operation.

(c) To document compliance with Condition D.4.10(b), the Permittee shall maintain once per day records of the fan amperes during normal operation.

(d) To document compliance with Condition D.4.12, the Permittee shall maintain records of baghouse inspections. These records shall include as a minimum, dates, initials of the person performing the inspections, results, and corrective actions taken in response to excursions as required by the CAM for the Castrip, CS-1 (if any are required).

(e) To document compliance with Condition D.4.5(d), the Permittee shall maintain records of the amount of Fluorspar applied at the Castrip.

(f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.13 Reporting Requirements

(a) A quarterly summary of the information to document compliance with Condition D.4.6 shall be submitted to the address(es) 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 thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall submit performance test protocols and performance test reports required by Operation Condition D.4.9 in accordance with the reporting requirements established in Section C - Performance Testing and Section C - General Reporting Requirements.

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

INSIGNIFICANT ACTIVITIES – MISCELLANEOUS SILOS

(a) Raw materials handling/storage, including silos which contain the following materials:

(1) One (1) lime silo TFS-1.

(2) Baghouse #1 lime silo (HRE #1).

(3) One (1) Iron Oxide Silo (IOS #1).

(4) Three (3) Baghouse Dust Silos (BHS#1, BHS#2, BHS#3).

(5) One (1) Soda Ash Silo (SAS #1) (this will become the sand silo).

(6) One (1) Iron Carbide Silo #1 (no longer in service).

(7) One (1) Lime Silo (#1 SEAF).

(8) One (1) Lime Silo (#2 SEAF).

(9) One (1) Lime Silo (#3 NEAF).

(10) One (1) Lime Silo (#4 NEAF).

(11) One (1) Injection Carbon Silo #1.

(12) One (1) Injection Carbon Silo #2.

(13) One (1) Charge Carbon Silo #1.

(14) One (1) Charge Carbon Silo #2.

(15) Three (3) AOD alloy system silos (AOD#1, AOD#2, and AOD#3).

(16) Ten (10) Melt Shop Alloy Feed System silos (MS alloy #1, MS alloy #2, MS alloy #3, MS alloy #4, MS alloy #5, MS alloy #6, MS alloy #7, MS alloy #8, MS alloy #9, MS alloy #10).

(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 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate emissions from the insignificant silos shall not exceed a pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission is pounds per hour and
P = process weight rate in tons per hour

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

INSIGNIFICANT ACTIVITIES – CASTRIP – COILERS, COIL CUTTING, AND HOT ROLLING STAND

Activities with emissions equal to or less than the thresholds provided in 326 IAC 2-7-1(21):

(b) Two (2) coilers, identified as C-1 and C-2, constructed in 2002. Fugitive particulate emissions from this process are controlled by the application of water to the coilers and exhausting to the roof monitor S-21. These coil the steel strip from the continuous strip caster.

(c) Scrap coil cutting in the Castrip area, identified as CC-1, constructed in 2002, occurs on an as needed basis, controlled by the Castrip LMS Baghouse and exhausting to stack S-20.

(d) Two (2) hot rolling stands, identified as HRS #1 and HRS #2, constructed in 2002. These stands roll the steel strip from the continuous strip caster to the desired gauge. Fugitive particulate emissions controlled by the application of water to the steel strip, and exhausting to the LMS roof monitor identified as S-21.

(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 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate emissions from the insignificant coilers, coil cutting, and hot rolling stand shall not exceed a pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the following equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour, and
P = process weight rate in tons per hour

D.6.2 Baghouse Operation [326 IAC 2-2]

(a) Pursuant to PSD SSM 107-16823-00038, issued November 21, 2003, and 326 IAC 2-2, the Castrip LMS Baghouse for particulate control shall be in operation and control emissions at all times that coil cutting is operating in the Castrip area, except for when the Meltshop LMF Baghouse serves as a back up.

(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.

SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

WASTEWATER TREATMENT PLANT

(l) One wastewater treatment plant, identified as WWTP, constructed in September 2002, consisting of two water recovery systems i.e. oil/alkali wastes and acid rinse water, and surge vessels for the regenerated acid, acid rinse water and spent pickle liquor. The WWTP consists of following:

(1) Oily waste tanks:

(A) Two (2) batch treatment tanks, identified as T-853 and T-854, with a maximum capacity of 12,000 gallons each, with emissions uncontrolled, and exhausting inside the building.

(B) One (1) decant oil tank, identified as T-856, with maximum capacity of 9,000 gallons with emissions uncontrolled, and exhausting inside the building.

(C) One (1) oily waste evaporator feed tank, identified as T-858, with maximum capacity of 20,000 gallons with emissions uncontrolled.

(D) One (1) oily waste evaporator concentrate tank, identified as T-857, with maximum capacity of 20,000 gallons with emissions uncontrolled, and exhausting inside the building.

(2) Acid tanks:

(A) Three (3) acid rinse water surge tanks, identified as T-850, T-851 and T-852, with a maximum capacity of 33,000 gallons each, with emissions controlled by the pickle line scrubber #1, and exhausting to stack S-17.

(B) One (1) lime neutralization tank, identified as T-875, with maximum capacity of 10,000 gallons, with emissions controlled by a wet particulate scrubber, and exhausting to stack S-60.

(C) One (1) acidic rinse evaporator feed tank, identified as T-877, with maximum capacity of 20,000 gallons with emissions uncontrolled and exhausting to stack S-17.

(D) One (1) acidic rinse evaporator concentrator tank, identified as T-878, with maximum capacity of 20,000 gallons with emissions uncontrolled and exhausting to stack S-17.

(3) Two (2) closed chamber type evaporators, identified as EV-1 and EV-2, each with a maximum capacity of 1,800 gallons per hour. This is a closed loop system with no emissions.

(m) Three (3) regenerated acid tanks, identified as T-867, T-868 and T-869, constructed in September 2002, with a maximum capacity of 33,000 gallons each, with emissions controlled by the pickle line scrubber, and exhausting to S-17.

Under 40 CFR Part 63, Subpart CCC, these units are considered new hydrochloric acid storage vessels.

(n) Four (4) spent pickle liquor tanks, identified as T-863, T-864, T-865 and T-866, constructed in September 2002, each with a maximum capacity of 33,000 gallons each, with emissions controlled by the pickle line scrubber, and exhausting to S-17.

(o) Lime silo system, constructed in 1989 and relocated in September 2002, including the following equipment:

(1) One (1) lime silo, identified as TFS-1, with a maximum capacity of 60,000 pounds.

(2) One (1) live bin bottom.

(3) One (1) screw conveyor.

(4) One (1) wet particulate scrubber.

(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(i)]

D.7.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A (General Provisions), which are incorporated by reference in 326 IAC 20-1, apply to HCl storage vessels T-867, T-868, and T-869 except when otherwise specified in 40 CFR Part 63, Subpart CCC.

D.7.2 Steel Pickling – HCl Process Facilities and Hydrochloric Acid Regeneration Plants NESHAP [40 CFR Part 63, Subpart CCC][326 IAC 20]

Pursuant to MSM 107-14782-00038, issued October 4, 2001, 40 CFR Part 63, Subpart CCC and 326 IAC 20-1-1, HCl storage vessels T-867, T-868, and T-869 are subject to the following conditions:

The owner or operator 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.

SECTION D.8 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

SLAG PROCESSING

(p) Slag processing, identified as EU-10, constructed in 1989, is performed by Whitesville Mill Service Company, an on-site contractor. Slag and other steel mill related materials are transported by slag pots or other mobile equipment, processed, and stockpiled with a maximum throughput of 305 tons/hr. This emission unit consists of storage piles (unprocessed and processed materials), grizzly feeding, slag processing (screening, conveying, and crushing), slag pot dumping, product loading for transport, and unpaved roads. The fugitive emissions from slag processing are controlled by water sprays and exhaust to the atmosphere.

(q) One (1) mill scale screen and conveyor system, identified as MSS-1, constructed in 2001, with a maximum throughput rate of 350 tons of mill scale per hour, with emissions uncontrolled, and exhausting to the atmosphere.

(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 PSD (Prevention of Significant Deterioration) - BACT [326 IAC 2-2]

(a) Pursuant to PSD 107-2764-00038, issued on November 30, 1993, the Fugitive Dust Control Plan (included as Attachment A to this permit), shall be implemented to control fugitive dust from paved roads, unpaved roads, parking lots, traveled open areas, and uncontrolled slag process and storage pile emissions. Adherence to the fugitive dust control plan is considered BACT.

(b) Pursuant to A 107-8255-00038 to PSD 107-2764-00038, issued November 30, 1993, and 326 IAC 2-2, the fugitive dust emissions from the various slag handling and processing operations shall be controlled in accordance with the Fugitive Dust Control Plan approved on March 28, 1999 (attached as Attachment A to this permit) such that the following opacity limitations are not exceeded at each point where such slag handling and processing operations occur:

Slag Handling/Processing Operation	**Opacity Limitation***
Transferring of skull slag to slag pot	10% Opacity
Pouring of liquid slag from EAF or Caster to slag pots	3% Opacity
Dumping of liquid slag from slag pot to slag pit and cooling	3% Opacity
Transferring of skull slag from slag pot to skull pit	5% Opacity
Digging skull slag pits	5% Opacity
Digging slag pits	3% Opacity
Stockpiling of slag adjacent to the grizzly feeder	3% Opacity
Wind erosion of stockpiles	3% Opacity
Crushing	3% Opacity
Screening	3% Opacity
Conveyor transfer points	3% Opacity
Continuous stacking of processed slag to stockpiles	3% Opacity

Slag Handling/Processing Operation	Opacity Limitation*
Loadout of processed slag from stockpiles to haul trucks for shipment	3% Opacity
Inplant hauling of slag pots (filled) and processed slag	3% Opacity

*All opacity limitations are based on six (6) minute averages.

These emission limits are considered BACT.

D.8.2 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]

Pursuant to MSM 107-15599-00038, issued April 10, 2002, the mill scale throughput rate to the mill scale screen and conveyor system (MSS-1) shall not exceed 1,092,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit is equivalent to less than or equal to 18.8 tons/yr of PM emissions and less than or equal to 9.0 tons/yr of PM10 emissions. Emissions from the 2002 modification limited to less than 25 tons per year of PM and 15 tons per year of PM10. Compliance with this limit renders the requirements of 326 IAC 2-2 not applicable.

D.8.3 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the mill scale screen and conveyor system (MSS-1) shall not exceed 64.8 pounds per hour when operating at a process weight rate of 350 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.8.4 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the slag processing operation (EU-10) shall not exceed 63.2 pounds per hour when operating at a process weight rate of 305 tons per hour.

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Compliance Determination Requirements

D.8.5 PM/PM10 Emissions

Compliance with Condition D.8.2 shall be demonstrated within 30 days of the end of each month based on the total throughput weight for the most recent twelve (12) consecutive month period.

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

D.8.6 Visible Emissions Notations

(a) Visible emission notations of the exhaust from MSS-1 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 steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.8.7 Record Keeping Requirements

(a) To document compliance with Condition D.8.2, the Permittee shall maintain records of the mill scale throughput weight for each compliance period.

(b) To document compliance with Condition D.8.6, the Permittee shall maintain records of the once per day visible emission notations.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.8.8 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.8.2 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 thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.9 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

BOC GASES PLANT

(r) The BOC Gases Plant is operated by BOC Gases, an on-site contractor. It provides gases (oxygen, nitrogen, hydrogen, argon, and liquid air) consisting of:

(1) One (1) natural gas-fired boiler identified as ID No. 1, constructed in 1989, with a heat input capacity of 9 MMBtu per hour, with emissions uncontrolled, and exhausting to stack S-36. This boiler uses propane as a backup fuel.

(2) One (1) natural gas-fired boiler, identified as ID No. 2, constructed in 1994, with a heat input capacity of 15.0 MMBtu per hour, with emissions uncontrolled, and exhausting to stack S-37. This boiler uses propane as a backup fuel.

Under 40 CFR Part 60, Subpart Dc, this unit is considered a steam generating unit.

(3) One (1) natural gas-fired boiler, identified as the hydrogen plant boiler, constructed in 1996, with a heat input capacity of 9.98 MMBtu per hour, with Emissions uncontrolled, and exhausting to stack S-30. This boiler uses propane as a backup fuel.

(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 Preventive Maintenance Plan (PMP) [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan (PMP), in accordance with Section B – Preventive Maintenance Plan (PMP), of this permit, is required for the facilities listed in this section.

D.9.2 BOC Gases Boiler PSD BACT [326 IAC 2-2]

(a) Pursuant to 326 IAC 2-2 and PSD 107-5235-00038, issued June 20, 1996, the Permittee shall comply with the following BACT requirements:

(1) The 9.98 MMBtu per hour hydrogen plant boiler shall burn natural gas with propane as backup fuel.

(2) The NOx emissions from the 9.98 MMBtu per hour hydrogen plant boiler shall not exceed 100 pounds per million cubic feet of natural gas combusted.

(b) Pursuant to 326 IAC 2-2 and PSD 107-3702-00038, issued March 28, 1995:

(1) The 9.0 MMBtu per hour boiler (ID No. 1) and the 15.0 MMBtu per hour boiler (ID No. 2) shall burn natural gas with propane as backup fuel.

(2) The NOx emissions from the 15.0 MMBtu per hour boiler (ID No. 2) shall not exceed 140 pounds per million cubic feet of natural gas combusted.

(3) The NOx emissions from the 9.0 MMBtu per hour boiler (ID No. 1) shall not exceed 100 pounds per million cubic feet of natural gas combusted.

D.9.3 Particulate Matter Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-3, the particulate matter (PM) from:

(a) The 9.98 MMBtu per hour heat input hydrogen plant boiler shall be limited to 0.363 pounds per MMBtu heat input.

(b) The 9.0 MMBtu per hour heat input boiler (ID No. 1) shall be limited to 0.41 pounds per MMBtu heat input

(c) The 15.0 MMBtu per hour heat input boiler (ID No. 2) shall be limited to 0.379 pounds per MMBtu heat input

These limitations are based on the following equation:

$Pt = 1.09 / Q^{0.26}$ where Pt = Pounds of PM emitted per million Btu (lb/MMBtu) heat input, and

Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu per hour) heat input.

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

D.9.4 Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] [40 CFR Part 60 Subpart Dc]

(a) Pursuant to 40 CFR 60.48c(g), the Permittee shall keep records of the fuel used each day by Boiler ID No. 2, including the types of fuel and amount used.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit.

SECTION D.10 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

INSIGNIFICANT ACTIVITIES – PAVED AND UNPAVED ROADS

(e) Paved and unpaved roads and parking lots with public access. Transport on new and existing paved roadways and parking lots, unpaved roadways, and unpaved areas around existing raw material storage piles.

(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 PSD Requirements [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and PSD SSM 107-21359-00038, issued April 27, 2006, the paved surface silt loading shall not exceed 16.8 pounds of silt per mile and the average instantaneous opacity from paved roadways and parking lots shall not exceed ten percent (10%).

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:

(a) The first reading will be taken at the time of emission generation;

(b) The second reading will be taken five (5) seconds later; and

(c) The third reading will be taken five (5) seconds later or ten (10) seconds after the first reading.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand at least fifteen (15) feet, but no more than one-fourth (1/4) mile, from the plume and as close to approximately right angles to the plume as permissible under EPA Reference Method 9. Each reading shall be taken approximately four (4) feet above the surface of the paved roadway.

D.10.2 PSD Requirements [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and PSD SSM 107-21359-00038, issued April 27, 2006, the visible emissions from unpaved roadways and unpaved areas around raw material storage piles shall not exceed an average instantaneous opacity of ten percent (10%).

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:

(a) The first reading will be taken at the time of emission generation;

(b) The second reading will be taken five (5) seconds later; and

(c) The third reading will be taken five (5) seconds later or ten (10) seconds after the first reading.

The three (3) readings shall be taken at the point of maximum opacity.

The observer shall stand at least fifteen (15) feet, but no more than one-fourth (1/4) mile, from the plume and as close to approximately right angles to the plume as permissible under EPA Reference Method 9.

Each reading shall be taken approximately four (4) feet above the surface of the unpaved roadway.

D.10.3 PSD Requirements [326 IAC 2-2]

Pursuant to PSD 107-2764-00038, issued on November 30, 1993, the Fugitive Dust Control Plan (included as Attachment A to this permit), shall be implemented to control fugitive dust from paved roads, unpaved roads, parking lots, traveled open areas, and uncontrolled slag process and storage pile emissions.

Adherence to the fugitive dust control plan is considered a BACT requirement.

SECTION D.11 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

PETROLEUM PRODUCT STORAGE

(s) One (1) 500 gallon aboveground gasoline storage tank, identified as GST #1, installed in 1988, using submerged filling technology to control VOC emissions, which exhausts to the atmosphere.

(t) Three (3) 500 gallon aboveground diesel storage tanks, identified as DST #1, DST #2, and DST #3, all installed in 1988, using submerged filling technology to control VOC emissions, which exhausts to the atmosphere.

(u) One (1) 5,000 gallon aboveground diesel storage tank, identified as DST #4, installed in 1988, using submerged filling technology to control VOC emissions, which exhausts to the atmosphere.

(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 Petroleum Product Storage PSD BACT [326 IAC 2-2]

The petroleum product storage shall be limited as follows:

(a) Pursuant to 326 IAC 2-2 and PSD 107-2764-00038, issued November 30, 1993, amended August 11, 1999 via A 107-11154-00038, the one (1) 500 gallon aboveground gasoline storage tank (GST #1) shall use submerged filling technology to control VOC emissions.

(b) Pursuant to 326 IAC 2-2 and PSD 107-2764-00038, issued November 30, 1993, amended August 11, 1999 via A 107-11154-00038, the three (3) 500 gallon aboveground diesel storage tanks (DST #1, DST #2, DST #3) shall use submerged filling technology to control VOC emissions.

(c) Pursuant to 326 IAC 2-2 and PSD 107-2764-00038, issued November 30, 1993, amended August 11, 1999 via A 107-11154-00038, the one (1) 5000 gallon aboveground diesel storage tank (DST #4) shall use submerged filling technology to control VOC emissions.

(d) Pursuant to PSD 107-2764-00038, issued November 30, 1993, the visible emissions from each petroleum product storage tank shall not exceed 5% opacity, based on a 6-minute average.

SECTION D.12 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

COOLING TOWERS

(v) The contact and noncontact cooling towers are equipped with drift eliminators. Each cooling tower exhausts to the atmosphere.

Cooling Towers	No. of Cells	Capacity (gal/min)	Cooling Towers	No. of Cells	Average Capacity (gal/min)
Meltshop Non Contact	9	60,000	Galvanizing/Annealing Non Contact	2	6,500
Meltshop Caster Contact	2	5,000	Annealing Non Contact	2	5,000
Meltshop Caster Contact (expansion)	2	5,000	Castrip Contact	4	12,000
Hot Mill Contact	4	16,383	Castrip Non Contact	7	14,400
Hot Mill Contact (expansion)	1	4,000	Castrip Compressor Non Contact	3	2,400
Hot Mill Non Contact	4	25,319	BOC Non Contact (CT-91A)	1	750
Laminar Contact	3	11,600	BOC Non Contact (CT-91B)	2	3,200
Cold Mill Non Contact	2	10,000	Main Compressor Non Contact	4	3,200
Cold Mill Non Contact (expansion)	1	5,000			
Vacuum Degasser Contact	1	8,000	Vacuum Degasser Non Contact	1	8,000

(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 Cooling Towers PSD BACT [326 IAC 2-2]

Pursuant to 326 IAC 2-2, PSD SSM 107-16823-00038, issued November 21, 2003, and PSD SSM 107-21359-00038, issued April 27, 2006, the Permittee shall comply with the following BACT requirements:

(a) The design drift rate from each cooling tower shall not exceed 0.005%.

(b) The Permittee shall retain records demonstrating that the cooling towers are designed to achieve 0.005% drift.

(c) The visible emissions from each cooling tower shall not exceed 20% opacity, based on a 6-minute average.

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.12.2 Drift/Mist Eliminators [326 IAC 2-2]

Pursuant to PSD SSM 107-16823-00038, issued November 21, 2003, and PSD SSM 107-21359-00038, issued April 27, 2006, the integral drift/mist eliminators shall be in operation at all times that the respective cooling towers are in operation.

SECTION D.13 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

INSIGNIFICANT ACTIVITIES – SCRAP HANDLING AND PROCESSING

Activities with emissions equal to or less than the thresholds provided in 326 IAC 2-7-1(21):

(f) Scrap handling, processing and cutting of ferrous metals and scrap substitutes. These activities exhaust indoors to general ventilation which in turn exhausts to Meltshop EAF baghouses 1 and 2.

(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 Scrap Handling, Processing and Cutting [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and PSD SSM 107-16823-00038, issued November 21, 2003, the Permittee shall comply with the following BACT requirements:

(a) Skulls, coils and steel scrap shall be mechanically reduced in size. Any skull, coil, steel scrap not mechanically reduced in size can be lanced out or transported to the steel works building or another suitable building.

(b) Good working practices shall be observed.

(c) Scrap cutting allowed outdoors is limited to scrap items such as furnace roof, railroad cards, ductwork, long pieces of scrap pipe and bar stock, that can not fit in the existing building. Galvanized scrap shall not be cut outdoors. Outdoor means the cutting is done outside of a building.

(d) The visible emissions from the building enclosing the scrap cutting operation shall not exceed 3% opacity based on a 6-minute average.

(e) The visible emissions from the outdoor scrap cutting operation shall not exceed 3% opacity based on a 6-minute average.

D.13.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate emissions from the insignificant scrap handling and cutting shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the following equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour, and
P = process weight rate in tons per hour

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

D.13.3 Visible Emissions Notations

(a) Visible emission notations of the scrap handling, processing and cutting building shall be performed once per day when scrap cutting is performed in that building. 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 steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or 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.13.4 Record Keeping Requirements

(a) The Permittee shall maintain records of the once per day visible emission notations required by Condition D.13.3.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit.

SECTION D.14 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

EMERGENCY GENERATORS

(w) Diesel fired generators and air compressors for power outages and emergencies.

(1) Cold Mill generator, identified as GEN #3, constructed in 1997, with a capacity of 280 HP, with emissions uncontrolled.

(2) Hot Mill NC Cooling Tower generator, identified as GEN #1, constructed in 1989, with a capacity of 2,100 HP, with emissions uncontrolled.

(3) Galv Line Pot generator, identified as GEN #4, constructed in 1992, with a capacity of 890 HP, with emissions uncontrolled.

(4) MS Cooling Tower Cold Well generator, identified as GEN #2, constructed in 1996, with a capacity of 2,520 HP, with emissions uncontrolled.

(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 Emergency Generators PSD BACT [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and PSD SSM 107-16823-00038, issued November 21, 2003, the Permittee shall comply with the following BACT requirements:

(a) The emergency generators shall solely provide back up power when electric power is interrupted, or during maintenance or testing of generators.

(b) Each emergency generator shall not operate more than 500 hours per 12- consecutive month period with compliance demonstrated at the end of each month.

(c) The sulfur content of the diesel fuel used shall not exceed 0.05% by weight.

(d) Good combustion practices shall be performed.

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

D.14.2 Record Keeping Requirements

(a) The Permittee shall maintain records of the hours of operation of each emergency generator.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit.

SECTION D.15 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

INSIGNIFICANT ACTIVITIES – GASOLINE DISPENSING FACILITIES

(g) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles or other mobile equipment, having a storage capacity less than or equal to 10,500 gallons.

(1) Two (2) 10,000 gallon gasoline storage tanks, each handling less than 1,000 gallons per day.

(2) Two (2) 10,000 gallon diesel storage tanks, each handling less than 3,000 gallons per day.

(3) One (1) 1,000 gallon diesel storage tank handling less than 500 gallons per day.

(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 Gasoline Dispensing Facilities [326 IAC 8-4-6]

(a) Pursuant to 326 IAC 8-4-6, the Permittee operating a gasoline dispensing facility shall not allow the transfer of gasoline between any transport and any storage tank unless such a tank is equipped with the following:

(1) A submerged fill pipe.

(2) Either a pressure relief valve set to release at no less than seven-tenths (0.7) pounds per square inch or an orifice of five-tenths (0.5) inch in diameter.

(3) A vapor balance system connected between the tank and the transport, operating according to the manufacturer's specifications.

(b) If the Permittee is not present during loading, it shall be the responsibility of the owner or operator of the transport to make certain the vapor balance system is connected between the transport and the storage tank and is operating according to the manufacturer's specifications.

SECTION D.16 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

COLD MILL – PICKLE LINES 1 AND 2

(x) Both Pickle Lines use enhanced HCl pickling solution and rinse water and are equipped with process tanks.

(1) Pickle Line 1, identified as PL1, constructed in 1988, with a maximum capacity of 250 tons/hr, controlled by a counter flow-packed scrubber and mist eliminators, and exhausting to stack S-17. The Pickle Line 1 scrubber has a design flow rate of 12,000 acf/min and a loading of 0.01 gr/dscf. Each pickle line has an electric static oiler.

Under 40 CFR Part 63, Subpart CCC, Pickle Line 1 is considered an existing continuous pickle line.

(2) Pickle Line 2, consisting of the following units:

(A) One (1) Pickle Line, identified as PL2, constructed in 1997, with a maximum capacity of 250 tons/hr, controlled by a tray scrubber and mist eliminators, and exhausting to stack S-18. The Pickle Line 2 scrubber has a design flow rate of 9,000 acf/min and a loading of 0.01 gr/dscf. Each pickle line has an electric static oiler.

Under 40 CFR Part 63, Subpart CCC, Pickle Line 2 is considered a continuous pickle line.

(B) One (1) acidless metal cleaning line, identified as AMC, approved for construction in 2007, located on Pickle Line 2, with a maximum throughput capacity of 250 tons of steel per hour, using continuous abrasive blasting to remove scale from steel coil, with a maximum blast rate of 272,160 pounds of steel grit/shot per hour, with particulate emissions controlled by a baghouse, and exhausting to stack S-AMC.

(3) The tank farm treats the rinse water from Pickle Line 1 and Pickle Line 2. These tanks also store spent acid, raw acid, regenerated acid, oily wastewater treated waters for reuse, treatment process wastewater, and other process and treated waters.

Under 40 CFR Part 63, Subpart CCC, the tanks that store virgin or regenerated hydrochloric acid are considered new hydrochloric acid storage vessels.

(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 Pickling PSD BACT [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and PSD SSM 107-16823-00038, issued on November 21, 2003, Pickle Lines 1 and 2 (PL1 and PL2) shall comply with the following BACT requirements:

(a) Each pickling line (PL1 and PL2) shall be controlled by its own scrubber and with an exhaust grain loading of no greater than 0.01 gr/dscf.

(b) Each tank shall operate with a closed vent system, covered by lids, and maintained under negative pressure, except during loading and unloading.

(c) Loading and unloading shall be conducted either through enclosed lines or each point shall be controlled.

(d) The visible emissions from each pickling line scrubber stack shall not exceed 5% opacity, based on a 6-minute average.

(e) Good working practices shall be observed, such as adjusting damper controls and settings on the fume systems.

D.16.2 PSD Minor Limits [326 IAC 2-2]

(a) The PM emissions from emission unit AMC shall be limited to less than 5.7 pounds per hour.

(b) The PM10 emissions from emission unit AMC shall be limited to less than 3.42 pounds per hour.

(c) The Beryllium emissions from emission unit AMC shall be limited to less than 9.1E-5 pounds per hour.

Compliance with these limits will render the requirements of 326 IAC 2-2 (PSD) not applicable.

D.16.3 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from Pickle Line 1 and Pickle Line 2 (PL1 and PL2) each shall not exceed 61.0 pounds per hour each when operating at process weight rates of 250 tons per hour each.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

(b) Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the acidless metal cleaning line (AMC) shall not exceed 61.0 pounds per hour when operating at a process weight rate of 250 tons per hour. The pound per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} – 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.16.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan (PMP), in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for Pickle Lines 1 and 2 (PL1 and PL2) and the acidless metal cleaning line (AMC) and their control devices.

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.16.5 Scrubber Operation [326 IAC 2-2][40 CFR 63, Subpart CCC]

Pursuant to PSD SSM 107-16823-00038, issued November 21, 2003, 326 IAC 2-2 and 40 CFR Part 63, Subpart CCC, and as revised in this permit modification:

(a) The Pickle Line 1 (PL1) scrubber shall be in operation and control emissions at all times that the Pickle Line 1 is in operation.

(b) The Pickle Line 2 (PL2) scrubber shall be in operation and control emissions at all times that pickling is occurring at Pickle Line 2.

D.16.6 Testing Requirements [326 IAC 2-7-6(1)] [40 CFR Part 63, Subpart CCC] [326 IAC 20] [326 IAC 2-1.1-11]

(a) Pursuant to 40 CFR Part 63, Subpart CCC, and PSD SSM 107-16823-00038, issued November 21, 2003, and in order to demonstrate compliance with Condition D.16.1(a), the Permittee shall perform the following testing no later than September 30, 2006 for the PL1 scrubber and August 31, 2007 for the PL2 scrubber:

(1) Determine the collection efficiency of each scrubber by simultaneously measuring mass flows of HCl at the inlet and outlet of each scrubber (PL1 scrubber and PL2 scrubber); or

(2) Measure the HCl concentration in gases exiting the process or scrubbers;

Testing shall be completed utilizing methods specified in 40 CFR Part 63, Subpart CCC or other methods as approved by the Commissioner.

(b) Any stack which has multiple processes which exhaust to the same stack shall operate all of the processes simultaneously in accordance with 326 IAC 3-5 (Source Sampling Procedures).

(c) These tests shall be repeated at least once every 2.5 years from the date of a valid compliance demonstration.

(d) Testing shall be conducted in accordance with Section C - Performance Testing.

(e) Within sixty (60) days after achieving maximum production rate, but not later than 180 days after initial startup, and in order to demonstrate compliance with Conditions D.16.2 and D.16.3, the Permittee shall perform PM, PM10, and Beryllium testing for emission unit AMC utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensable PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

D.16.7 Particulate Control [326 IAC 2-2] [326 IAC 6-3-2]

(a) In order to comply with Conditions D.16.2 and D.16.3, the baghouse for particulate control shall be in operation and control emissions from the acidless metal cleaning line (AMC) at all times that the acidless metal cleaning line (AMC) 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.

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

D.16.8 Scrubber Detection

In the event that a scrubber malfunction 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). Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.16.9 Visible Emissions Notations [326 IAC 2-7-5(3)(A)(iii)][326 IAC 2-7-5(d)]

(a) Visible emission notations of the acidless metal cleaning line (AMC) baghouse stack exhaust 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 steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

D.16.10 Baghouses Parametric Monitoring [326 IAC 2-7-5(3)(A)(iii)][326 IAC 2-7-5(d)]

The Permittee shall record the pressure drop across the baghouse used in conjunction with the acidless metal cleaning line (AMC) at least once per day when the acidless metal cleaning line (AMC) 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 steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from 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, and shall be calibrated at least once annually.

D.16.11 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 unit has 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 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).

Bag failure can be indicated by a significant drop in the baghouse 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 Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.16.12 Record Keeping Requirements

(a) To document compliance with Condition D.16.9, the Permittee shall maintain a daily record of the visible emission notations at the acidless metal cleaning line (AMC) baghouse stack 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).

(b) To document compliance with Condition D.16.10, the Permittee shall maintain a daily record of the pressure drop across the baghouse controlling emission unit. 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, (e.g., the process did not operate that day).

(c) In order to demonstrate compliance with Conditions D.16.5(b) and D.16.7(a), the Permittee shall maintain a daily record of when the acidless metal cleaning (AMC) is in operation and no pickling is occurring at Pickle Line 2.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

National Emissions Standards for Hazardous Air Pollutants (NESHAP) Requirements: HCl Process Facilities and Hydrochloric Acid Regeneration Plants

D.16.13 General Provisions Relating to NESHAP [326 IAC 20-1] [40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.1155, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1, for the Pickle Line 1, identified as PL1, Pickle Line 2, identified as PL2, and the tanks in the tank farm that store virgin or regenerated hydrochloric acid from Pickle Line 1 and Pickle Line 2 as specified in Appendix A of 40 CFR Part 63, Subpart CCC in accordance with schedule in 40 CFR Part 63, Subpart CCC.

D.16.14 National Emissions Standards for Hazardous Air Pollutants for Steel Pickling-HCl Process Facilities and Hydrochloric Acid Regeneration Plants [40 CFR Part 63, Subpart CCC]

Pursuant to 40 CFR Part 63, Subpart CCC, Pickle Line 1, identified as PL1, Pickle Line 2, identified as PL2, and the tanks in the tank farm that store virgin or regenerated hydrochloric acid tank farm from Pickle Line 1 and Pickle Line 2 shall comply with the following provisions:

Subpart CCC—National Emission Standards for Hazardous Air Pollutants for Steel Pickling—HCl Process Facilities and Hydrochloric Acid Regeneration Plants

§ 63.1155 Applicability.

(a) The provisions of this subpart apply to the following facilities and plants that are major sources for hazardous air pollutants (HAP) or are parts of facilities that are major sources for HAP:

(1) All new and existing steel pickling facilities that pickle carbon steel using hydrochloric acid solution that contains 6 percent or more by weight HCl and is at a temperature of 100 °F or higher; and

(3) The provisions of this subpart do not apply to facilities that pickle carbon steel without using hydrochloric acid, to facilities that pickle only specialty steel, or to acid regeneration plants that regenerate only acids other than hydrochloric acid.

(b) For the purposes of implementing this subpart, the affected sources at a facility or plant subject to this subpart are as follows: Continuous and batch pickling lines, hydrochloric acid regeneration plants, and hydrochloric acid storage vessels.

(c) Table 1 to this subpart specifies the provisions of this part 63, subpart A that apply and those that do not apply to owners and operators of steel pickling facilities and hydrochloric acid regeneration plants subject to this subpart.

§ 63.1156 Definitions.

Terms used in this subpart are defined in the Clean Air Act, in subpart A of this part, or in this section as follows:

Batch pickling line means the collection of equipment and tanks configured for pickling metal in any form but usually in discrete shapes where the material is lowered in batches into a bath of acid solution, allowed to remain until the scale is dissolved, then removed from the solution, drained, and rinsed by spraying or immersion in one or more rinse tanks to remove residual acid.

Carbon steel means steel that contains approximately 2 percent or less carbon, 1.65 percent or less manganese, 0.6 percent or less silicon, and 0.6 percent or less copper.

Closed-vent system means a system that is not open to the atmosphere and that is composed of piping, ductwork, connections, and, if necessary, flow-inducing devices that transport emissions from a process unit or piece of equipment (e.g., pumps, pressure relief devices, sampling connections, open-ended valves or lines, connectors, and instrumentation systems) back into a closed system or into any device that is capable of reducing or collecting emissions.

Continuous pickling line means the collection of equipment and tanks configured for pickling metal strip, rod, wire, tube, or pipe that is passed through an acid solution in a continuous or nearly continuous manner and rinsed in another tank or series of tanks to remove residual acid. This definition includes continuous spray towers.

Hydrochloric acid regeneration plant means the collection of equipment and processes configured to reconstitute fresh hydrochloric acid pickling solution from spent pickle liquor using a thermal treatment process.

Hydrochloric acid regeneration plant production mode means operation under conditions that result in production of usable regenerated acid or iron oxide.

Hydrochloric acid storage vessel means a stationary vessel used for the bulk containment of virgin or regenerated hydrochloric acid.

Responsible maintenance official means a person designated by the owner or operator as having the knowledge and the authority to sign records and reports required under this rule.

Specialty steel means a category of steel that includes silicon electrical, alloy, tool, and stainless steels.

Spray tower means an enclosed vertical tower in which acid pickling solution is sprayed onto moving steel strip in multiple vertical passes.

Steel pickling means the chemical removal of iron oxide mill scale that is formed on steel surfaces during hot rolling or hot forming of semi-finished steel products through contact with an aqueous solution of acid where such contact occurs prior to shaping or coating of the finished steel product. This definition does not include removal of light rust or scale from finished steel products or activation of the metal surface prior to plating or coating.

Steel pickling facility means any facility that operates one or more batch or continuous steel pickling lines.

§ 63.1157 Emission standards for existing sources.

(a) *Pickling lines.* No owner or operator of an existing affected continuous or batch pickling line at a steel pickling facility shall cause or allow to be discharged into the atmosphere from the affected pickling line:

(1) Any gases that contain HCl in a concentration in excess of 18 parts per million by volume (ppmv); or

(2) HCl at a mass emission rate that corresponds to a collection efficiency of less than 97 percent.

§ 63.1158 Emission standards for new or reconstructed sources.

(a) *Pickling lines*—(1) *Continuous pickling lines.* No owner or operator of a new or reconstructed affected continuous pickling line at a steel pickling facility shall cause or allow to be discharged into the atmosphere from the affected pickling line:

(i) Any gases that contain HCl in a concentration in excess of 6 ppmv; or

(ii) HCl at a mass emission rate that corresponds to a collection efficiency of less than 99 percent.

§ 63.1159 Operational and equipment standards for existing, new, or reconstructed sources.

(b) *Hydrochloric acid storage vessels.* The owner or operator 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.

§ 63.1160 Compliance dates and maintenance requirements.

(a) *Compliance dates.* (1) The owner or operator of an affected existing steel pickling facility and/or hydrochloric acid regeneration plant subject to this subpart shall achieve initial compliance with the requirements of this subpart no later than June 22, 2001.

(2) The owner or operator of a new or reconstructed steel pickling facility and/or hydrochloric acid regeneration plant subject to this subpart that commences construction or reconstruction after September 18, 1997, shall achieve compliance with the requirements of this subpart immediately upon startup of operations or by June 22, 1999, whichever is later.

(b) *Maintenance requirements.* (1) The owner or operator of an affected source shall comply with the operation and maintenance requirements prescribed under §63.6(e) of subpart A of this part.

(2) In addition to the requirements specified in paragraph (b)(1) of this section, the owner or operator 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 title V permit. All such plans must be consistent with good maintenance practices and, for a scrubber emission control device, must at a minimum:

(i) 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;

(ii) 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;

(iii) Require cleaning of the scrubber internals and mist eliminators at intervals sufficient to prevent buildup of solids or other fouling;

(iv) Require an inspection of each scrubber at intervals of no less than 3 months with:

(A) Cleaning or replacement of any plugged spray nozzles or other liquid delivery devices;

(B) Repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components;

(C) Repair or replacement of droplet eliminator elements as needed;

(D) Repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber; and

(E) Adjustment of damper settings for consistency with the required air flow.

(v) If the scrubber is not equipped with a viewport or access hatch allowing visual inspection, alternate means of inspection approved by the Administrator may be used.

(vi) The owner or operator 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 of this subpart.

(vii) The owner or operator shall maintain a record of each inspection, including each item identified in paragraph (b)(2)(iv) of this section, 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.

§ 63.1161 Performance testing and test methods.

(a) *Demonstration of compliance.* The owner or operator shall conduct an initial performance test for each process or emission control device to determine and demonstrate compliance with the applicable emission limitation according to the requirements in §63.7 of subpart A of this part and in this section.

(1) Following approval of the site-specific test plan, the owner or operator 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 (and Cl_2 for hydrochloric acid regeneration plants) in gases exiting the process or the emission control device (to determine compliance with the applicable emission concentration standard).

(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 or Cl_2 exiting the process or the emission control device is less than or equal to the applicable emission concentration standard.

(b) *Establishment of scrubber operating parameters.* During the performance test for each emission control device, the owner or operator 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 owner or operator shall determine the operating parameter monitoring values as 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 paragraph (a)(2) of this section. An owner or operator may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, an owner or operator may reestablish compliant operating parameter values as part of any performance test that is conducted subsequent to the initial test or tests.

(d) *Test methods.* (1) The following test methods in appendix A of 40 CFR part 60 shall be used to determine compliance under §63.1157(a), §63.1157(b), §63.1158(a), and §63.1158(b) of this subpart:

(i) Method 1, to determine the number and location of sampling points, with the exception that no traverse point shall be within one inch of the stack or duct wall;

(ii) Method 2, to determine gas velocity and volumetric flow rate;

(iii) Method 3, to determine the molecular weight of the stack gas;

(iv) Method 4, to determine the moisture content of the stack gas; and

(v) 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, and also to determine the concentration of Cl_2 discharged to the atmosphere from acid regeneration plants. 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 (30 dry standard cubic feet). The concentrations of HCl and Cl_2 shall be calculated for each run as follows:

C_{HCl}(ppmv) = 0.659 C_{HCl}(mg/dscm),

and C_{C12}(ppmv) = 0.339 C_{C12}(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.

(2) The owner or operator may use equivalent alternative measurement methods approved by the Administrator.

§ 63.1162 Monitoring requirements.

(a) The owner or operator of a new, reconstructed, or existing steel pickling facility or acid regeneration plant subject to this subpart shall:

(1) Conduct performance tests to measure the HCl mass flows at the control device inlet and outlet or the concentration of HCl exiting the control device according to the procedures described in §63.1161 of this subpart. Performance tests shall be conducted either annually or according to an alternative schedule that is approved by the applicable permitting authority, but no less frequently than every 2 1/2 years or twice per title V permit term. If any performance test shows that the HCl emission limitation is being exceeded, then the owner or operator is in violation of the emission limit.

(2) 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 §63.1160(b)(2) of this subpart.

(3) If an emission control device other than a wet scrubber is used, install, operate, and maintain systems for the measurement and recording of the appropriate operating parameters.

(4) Failure to record each of the operating parameters listed in paragraph (a)(2) of this section is a violation of the monitoring requirements of this subpart.

(5) 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.

(6) The owner or operator may develop and implement alternative monitoring requirements subject to approval by the Administrator.

(c) The owner or operator 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.

§ 63.1163 Notification requirements.

(a) *Initial notifications.* As required by §63.9(b) of subpart A of this part, the owner or operator shall submit the following written notifications to the Administrator:

(2) As required by §63.9(b)(2) of subpart A of this part, the owner or operator of an affected source that has an initial startup before June 22, 1999, shall notify the Administrator that the source is subject to the requirements of the standard. The notification shall be submitted not later than October 20, 1999 (or within 120 calendar days after the source becomes subject to this standard), and shall contain the information specified in §§63.9(b)(2)(i) through 63.9(b)(2)(v) of subpart A of this part.

(3) As required by §63.9(b)(3) of subpart A of this part, the owner or operator of a new or reconstructed affected source, or a source that has been reconstructed such that it is an affected source, that has an initial startup after the effective date and for which an application for approval of construction or reconstruction is not required under §63.5(d) of subpart A of this part, shall notify the Administrator in writing that the source is subject to the standards no later than 120 days after initial startup. The notification shall contain the information specified in §§63.9(b)(2)(i) through 63.9(b)(2)(v) of subpart A of this part, delivered or postmarked with the notification required in §63.9(b)(5) of subpart A of this part.

(4) As required by §63.9(b)(4) of subpart A of this part, the owner or operator of a new or reconstructed major affected source that has an initial startup after June 22, 1999, and for which an application for approval of construction or reconstruction is required under §63.5(d) of subpart A of this part shall provide the information specified in §§63.9(b)(4)(i) through 63.9(b)(4)(v) of subpart A of this part.

(5) As required by §63.9(b)(5) of subpart A of this part, the owner or operator who, after June 22, 1999, intends to construct a new affected source or reconstruct an affected source subject to this standard, or reconstruct a source such that it becomes an affected source subject to this standard, shall notify the Administrator, in writing, of the intended construction or reconstruction.

(b) *Request for extension of compliance.* As required by §63.9(c) of subpart A of this part, if the owner or operator of an affected source cannot comply with this standard by the applicable compliance date for that source, or if the owner or operator has installed BACT or technology to meet LAER consistent with §63.6(i)(5) of subpart A of this part, he/she may submit to the Administrator (or the State with an approved permit program) a request for an extension of compliance as specified in §§63.6(i)(4) through 63.6(i)(6) of subpart A of this part.

(c) *Notification that source is subject to special compliance requirements.* As required by §63.9(d) of subpart A of this part, an owner or operator of a new source that is subject to special compliance requirements as specified in §§63.6(b)(3) and 63.6(b)(4) of subpart A of this part shall notify the

Administrator of his/her compliance obligations not later than the notification dates established in §63.9(b) of subpart A of this part for new sources that are not subject to the special provisions.

(d) *Notification of performance test.* As required by §63.9(e) of subpart A of this part, the owner or operator of an affected source shall notify the Administrator 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 the Administrator to review and approve the site-specific test plan required under §63.7(c) of subpart A of this part and, if requested by the Administrator, to have an observer present during the test.

(e) *Notification of compliance status.* The owner or operator of an affected source shall submit a notification of compliance status as required by §63.9(h) of subpart A of this part when the source becomes subject to this standard.

§ 63.1164 Reporting requirements.

(a) *Reporting results of performance tests.* As required by §63.10(d)(2) of subpart A of this part, the owner or operator of an affected source shall report the results of any performance test as part of the notification of compliance status required in §63.1163 of this subpart.

(b) *Progress reports.* The owner or operator of an affected source who is required to submit progress reports under §63.6(i) of subpart A of this part shall submit such reports to the Administrator (or the State with an approved permit program) by the dates specified in the written extension of compliance.

(c) *Periodic startup, shutdown, and malfunction reports.* Section 63.6(e) of subpart A of this part requires the owner or operator of an affected source 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 times, 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) *Plan.* As required by §63.6(e)(3) of subpart A of this part, the owner or operator 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) *Reports.* As required by §63.10(d)(5)(i) of subpart A of this part, if actions taken by an owner or operator 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 owner or operator shall state such information in a semiannual report. The report, to be certified by the owner or operator 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) *Immediate Reports.* Any time an action taken by an owner or operator 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 owner or operator shall comply with all requirements of §63.10(d)(5)(ii) of subpart A of this part.

§ 63.1165 Recordkeeping requirements.

(a) *General recordkeeping requirements.* As required by §63.10(b)(2) of subpart A of this part, the owner or operator shall maintain records for 5 years from the date of each record of:

(1) The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);

(2) The occurrence and duration of each malfunction of the air pollution control equipment;

(3) All maintenance performed on the air pollution control equipment;

(4) Actions taken during periods of startup, shutdown, and malfunction and the dates of such actions (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when these actions are different from the procedures specified in the startup, shutdown, and malfunction plan;

(5) All information necessary to demonstrate conformance with the startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. This information can be recorded in a checklist or similar form (see §63.10(b)(2)(v) of subpart A of this part);

(6) 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;

(7) All results of initial or subsequent performance tests;

(8) If the owner or operator has been granted a waiver from recordkeeping or reporting requirements under §63.10(f) of subpart A of this part, any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements;

(9) If the owner or operator has been granted a waiver from the initial performance test under §63.7(h) of subpart A of this part, a copy of the full request and the Administrator's approval or disapproval;

(10) All documentation supporting initial notifications and notifications of compliance status required by §63.9 of subpart A of this part; and

(11) Records of any applicability determination, including supporting analyses.

(b) *Subpart CCC records.* (1) In addition to the general records required by paragraph (a) of this section, the owner or operator shall maintain records for 5 years from the date of each record of:

(i) Scrubber makeup water flow rate and recirculation water flow rate if a wet scrubber is used;

(ii) Calibration and manufacturer certification that monitoring devices are accurate to within 5 percent; and

(iii) Each maintenance inspection and repair, replacement, or other corrective action.

(3) The owner or operator shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Administrator for the life of the affected source or until the source is no longer subject to the provisions of this subpart. In addition, if the operation and maintenance plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the plan on record to be made available for inspection by the Administrator for a period of 5 years after each revision to the plan.

(c) *Recent records.* General records and subpart CCC records for the most recent 2 years of operation must be maintained on site. Records for the previous 3 years may be maintained off site.

Table 1 to Subpart CCC of Part 63—Applicability of General Provisions (40 CFR Part 63, Subpart A) to Subpart CCC

Reference	Applies to Subpart CCC	Explanation
63.1-63.5	Yes.	
63.6 (a)-(g)	Yes.	
63.6 (h)	No	Subpart CCC does not contain an opacity or visible emission standard.
63.6 (i)-(j)	Yes.	
63.7-63.9	Yes.	
63.10 (a)-(c)	Yes.	
63.10 (d) (1)-(2)	Yes.	
63.10 (d)(3)	No	Subpart CCC does not contain an opacity or visible emission standard.
63.10 (d) (4)-(5)	Yes.	
63.10 (e)-(f)	Yes.	
63.11	No	Subpart CCC does not require the use of flares.
63.12-63.15	Yes	

D.16.15 One Time Deadlines Relating to National Emission Standards for Hazardous Air Pollutants for Steel Pickling, HCl Process Facilities, and Hydrochloric Acid Regeneration Plants [40 CFR Part 63, Subpart CCC]

(a) The Permittee must conduct the initial performance tests within 60 days after achieving maximum production rate, but no later than 180 days after start-up.

(b) The Permittee must submit a notification of compliance status report for pickle line PL1 no later than October 20, 1999.

(c) The Permittee must submit a notification of compliance status report for pickle line PL2 no later than 120 days after initial startup.

SECTION D.17 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

COLD MILL – COLD REVERSING MILL 1 AND COLD MILL BOILER (CMB #1)

(y) Cold Reversing Mill 1, identified as EU-09, constructed in 1988, with a maximum capacity of 250 tons/hour. Emulsion oil is sprayed on the strip, controlled by hoods mounted on both sides of the mill stand and exhausting**,** through collision mist eliminators at a design flow rate of 84,000 acf/min and 0.01 gr/dscf, to stack S-32.

(z) One (1) natural gas fueled Cold Mill Boiler, identified as CMB#1, constructed in 1988, with a heat input capacity of 34 MMBtu per hour, with emissions uncontrolled and exhausting to stack S-19. The boiler uses propane as a backup fuel.

Under 40 CFR Part 63, Subpart DDDDD, this unit is considered an existing boiler in the large gaseous fuel subcategory.

Under 40 CFR Part 60, Subpart Dc, this unit is considered a steam generating unit.

(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.17.1 Cold Reversing Mill 1 PSD BACT Limit [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and PSD SSM 107-16823-00038, issued November 21, 2003, the Permittee shall comply with the following BACT requirements:

(a) The Cold Reversing Mill 1 (EU-09) shall not exceed its annual maximum capacity of 2,190,000 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month.

(b) The VOC emissions from the Cold Reversing Mill 1 (EU-09) shall not exceed 0.06 lb/ton of steel.

(c) The Cold Reversing Mill 1 shall comply with the following existing requirements specified in PSD 107-2764-00038, issued November 30, 1993:

(1) PM and PM_{10} emissions from the Cold Reversing Mill 1 (EU-09) shall be captured by hoods mounted on both sides of the mill stand and evacuated to a panel-type media packed collision mist eliminator and filter prior to venting to the atmosphere.

(2) Filterable PM and filterable PM_{10} emissions shall not exceed 0.01 gr/dscf, 7.2 pounds per hour, and 31.5 tons per year.

(3) The emissions from the Cold Reversing Mill 1 (EU-09) shall not exceed 5 percent opacity. Compliance with this condition shall be determined using 40 CFR 60 Appendix A, Method 9 and 326 IAC 5-1.

D.17.2 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the Cold Reversing Mill 1 (EU-09) shall not exceed 61.0 pounds per hour when operating at a process weight rate of 250 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.17.3 Cold Mill Boiler (CMB #1) PSD BACT [326 IAC 2-2]

(a) Pursuant to 326 IAC 2-2 and PSD SSM 107-16823-00038, issued November 21, 2003, the Permittee shall comply with the following BACT requirements once CMB #1 is modified as permitted by that approval:

(1) The Cold Mill Boiler (CMB #1) shall use pipeline natural gas as primary fuel and propane as back up fuel.

(2) The Cold Mill Boiler (CMB #1) shall be equipped and operated with low NO_x burners.

(3) The NO_x emissions from Cold Mill Boiler (CMB #1) shall not exceed 0.035 lb/MMBtu.

(4) The CO emissions from Cold Mill Boiler (CMB #1) shall not exceed 0.061 lb/MMBtu.

(5) The VOC emissions from Cold Mill Boiler (CMB #1) shall not exceed 0.0026 lb/MMBtu.

(6) The SO_2 emissions from Cold Mill Boiler (CMB #1) shall not exceed 0.0006 lb/MMBtu.

(7) The filterable and condensible PM_{10} emissions from Cold Mill Boiler (CMB #1) shall not exceed 0.0076 lb/MMBtu.

(8) The filterable PM emissions from Cold Mill Boiler (CMB #1) shall not exceed 0.0019 lb/MMBtu.

(9) Good combustion shall be practiced.

(b) Pursuant to PSD 107-2764-00038, issued November 30, 1993 and 326 IAC 2-2, the Permittee shall comply with the following BACT requirements for the Cold Mill Boiler (CMB #1) until it is modified as permitted by PSD SSM 107-16823-00038, issued November 21, 2003:

(1) The emissions shall not exceed 5 percent opacity. Compliance with this condition shall be determined using 40 CFR 60 Appendix A, Method 9 and 326 IAC 5-1.

(2) The Cold Mill Boiler (CMB #1) shall only use natural gas.

(3) The heat input shall not exceed 34.0 MMBtu per hour.

(4) PM/PM10 emissions shall not exceed 3.0 pounds per million cubic feet of natural gas burned, 0.1 pounds per hour and 0.4 tons per year.

(5) NOx emissions shall be controlled by the use of staged combustion low NOx burners, or their equivalent, and shall not exceed 200 pounds per million cubic feet of natural gas burned, 6.8 pounds per hour and 29.8 tons per year.

(6) CO emissions shall not exceed 35.0 pounds per million cubic feet of natural gas burned, 1.2 pounds per hour and 5.2 tons per year.

(7) VOC emissions shall not exceed 2.8 pounds per million cubic feet of natural gas burned, 0.1 pounds per hour and 0.4 tons per year.

D.17.4 Particulate Matter Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-3, the particulate matter (PM) from the 34.0 MMBtu per hour heat input Cold Mill boiler (CMB #1) shall be limited to 0.368 pounds per MMBtu heat input.

This limitation is based on the following equation:

$Pt = 1.09 / Q^{0.26}$ where Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input, and
Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu per hour) heat input.

D.17.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan (PMP), in accordance with Section B - Preventive Maintenance Plan (PMP) of this permit, is required for the facilities and control devices listed in this section.

D.17.6 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 boiler CMB #1, except when otherwise specified in 40 CFR Part 60, Subpart Dc.

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.17.7 Mist Eliminators [326 IAC 2-2]

Pursuant to PSD SSM 107-16823-00038, issued November 21, 2003, the mist eliminators for particulate control shall be in operation and control emissions at all times that Cold Reversing Mill 1 (EU-09) is in operation.

D.17.8 Natural Gas Fuel [326 IAC 2-2]

Pursuant to PSD SSM 107-16823-00038, issued November 21, 2003, and as revised by this Part 70 permit, boiler CMB #1 shall use only natural gas that is a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions. Natural gas contains 20.0 grains or less of total sulfur per 100 standard cubic feet. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 Btu per standard cubic foot. Natural gas does not include the following gaseous fuels: landfill gas, digester gas, refinery gas, sour gas, blast furnace gas, coal-derived gas, producer gas, coke oven gas, or any gaseous fuel produced in a process which might result in highly variable sulfur content or heating value.

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

D.17.9 Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] [40 CFR Part 60, Subpart Dc]

(a) To document compliance with Condition D.17.1, the Permittee shall maintain monthly records of steel production.

(b) Pursuant to 40 CFR 60.48c(g), and to document compliance with Condition D.17.3, the Permittee shall keep daily records of the fuel used by boiler CMB # 1.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.17.10 Reporting Requirements

A quarterly report of the information needed to document compliance with Condition D.17.1(a) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.18 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

COLD MILL – COLD MILL BOILER (CMB#2)

(aa) One (1) natural gas fueled Cold Mill Boiler (CMB #2), identified as EU-19, with a heat input capacity of 40 MMBtu per hour, with emissions exhausting to stack S-23. Propane is used as a back-up fuel. The Cold Mill Boiler (CMB #2) is approved for construction in 2007.

Under 40 CFR Part 60, Subpart Dc, this unit is considered a steam generating unit.

(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.18.1 Cold Mill Boiler PSD BACT Limit [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements), the Permittee shall comply with the following BACT requirements for the 40.0 MMBtu/hr Cold Mill Boiler (CMB #2):

(a) The Cold Mill Boiler (CMB #2) shall use pipeline natural gas as primary fuel and propane as back up fuel.

(b) The Cold Mill Boiler (CMB #2) shall be equipped and operated with low NO_x burners.

(c) The NO_x emissions from Cold Mill Boiler (CMB #2) shall not exceed 0.035 lb/MMBtu.

(d) The CO emissions from Cold Mill Boiler (CMB #2) shall not exceed 0.061 lb/MMBtu.

(e) The VOC emissions from Cold Mill Boiler (CMB #2) shall not exceed 0.0026 lb/MMBtu.

(f) The SO_2 emissions from Cold Mill Boiler (CMB #2) shall not exceed 0.0006 lb/MMBtu.

(g) The filterable and condensible PM_{10} emissions from Cold Mill Boiler (CMB #2) shall not exceed 0.0076 lb/MMBtu.

(h) The filterable PM emissions from Cold Mill Boiler (CMB #2) shall not exceed 0.0076 lb/MMBtu.

(i) Good combustion shall be practiced.

D.18.2 Particulate Matter Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

(a) Pursuant to 326 IAC 6-2-4, the particulate matter (PM) from the 40.0 MMBtu per hour heat input Cold Mill boiler CMB #2 shall be limited to 0.283 pounds per MMBtu heat input.

This limitation is based on the following equation:

$Pt = 1.09 / Q^{0.26}$ where Pt = Pounds of PM emitted per million Btu (lb/MMBtu) heat input, and

Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu per hour) heat input.

D.18.3 Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units [40 CFR Part 63, Subpart Dc]

Pursuant to 40 CFR 60, Subpart Dc, the Permittee shall comply with the requirements specified in E.1 for the Cold Mill Boiler (CMB #2) rated at 40.0 MMBtu/hr.

D.18.4 Preventive Maintenance Plan (PMP) [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan (PMP), in accordance with Section B – Preventive Maintenance Plan (PMP), of this permit, is required for the facility listed in this section.

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.18.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [326 IAC 2-2]

Within sixty (60) days after achieving maximum capacity but no later than one hundred and eighty (180) days after initial startup of the Cold Mill Boiler (CMB #2) in this SECTION D.18, the Permittee shall conduct performance tests to measure the NOx, CO, VOC, SO2, PM and PM10 emissions, utilizing methods as approved by the Commissioner. PM-10 includes filterable and condensible PM-10. NOx, CO, VOC, SO2, PM and PM10 emissions tests shall be repeated at least once every two and half (2.5) years from the date of the most recent valid compliance demonstration.

D.18.6 Natural Gas Fuel [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements), the Permittee shall use pipeline natural gas that is a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions, and which is provided by the supplier through a pipeline.

Natural gas does not include the following gaseous fuels: landfill gas, digester gas, refinery gas, sour gas, blast furnace gas, coal-derived gas, producer gas, coke oven gas, or any gaseous fuel produced in a process which might result in highly variable sulfur content or heating value.

SECTION D.19 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

COLD MILL – REVERSING AND TEMPERING (R/T) MILL

(bb) Reversing and Tempering (R/T) Mill, (previously known as Temper Mill), identified as EU-14, constructed in 1995, with a maximum capacity of 250 tons of steel per hour, with emulsion oil sprayed on the strip, and controlled by hoods mounted on both sides of the mill stand and a fabric filter, exhausting through a panel-type collision mist eliminators to stack S-22. The panel-type collision mist eliminator has a design flow rate of 84,000 acf/min and an outlet grain loading of 0.01 gr/dscf. Note: This mill can reverse and temper. The mist eliminators operate as controls only when the mill is operating as a cold reversing mill.

(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.19.1 Reversing and Tempering (R/T) Mill PSD BACT [326 IAC 2-2]

Pursuant to PSD SSM 107-16823-00038, issued November 21, 2003, and 326 IAC 2-2, the Permittee shall comply with the following BACT requirements:

(a) The R/T Mill shall not exceed its annual maximum capacity of 2,190,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month on a rolling 12-month basis.

(b) This R/T Mill is allowed to reverse and temper.

(c) The VOC emissions from the R/T Mill shall not exceed 0.06 lb/ton.

(d) The visible emissions from the R/T Mill stack shall not exceed 5% opacity, based on a 6-minute average.

(e) The R/T Mill shall comply with the following requirements specified in PSD 107-3702-00038, issued March 28, 1995:

(1) When reversing, PM and PM10 emissions from the R/T Mill shall be captured by hoods mounted on both sides of the mill stand and evacuated to a panel-type media packed collision mist eliminator and filter prior to venting to the atmosphere.

(2) When reversing, filterable PM and PM_{10} shall not exceed 0.01 gr/dscf, 7.2 pounds per hour, and 31.5 tons per year.

D.19.2 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the R/T Mill shall not exceed 61.0 pounds per hour when operating at a process weight rate of 250 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.19.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan (PMP), in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.19.4 Mist Eliminators [326 IAC 2-2]

Pursuant to PSD SSM 107-16823-00038, issued November 21, 2003, the mist eliminators for particulate control shall be in operation and control emissions at all times that the R/T Mill is in operation as a cold reversing mill.

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

D.19.5 Record Keeping Requirements

(a) The Permittee shall maintain monthly records of the amount of steel processed in the R/T Mill.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.19.6 Reporting Requirements

A quarterly report of the information needed to document compliance with Condition D.19.1(a) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.20 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

COLD MILL – ALKALINE CLEANING STATION

(cc) Alkali Cleaning at the Galvanizing line with mist eliminator as control. Emissions are exhausted to stack #510. The Alkaline Cleaning Station has a capacity of 140 tons of steel 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)]

D.20.1 Alkali Cleaning PSD BACT [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and PSD SSM 107-16823-00038, issued November 21, 2003, the Permittee shall comply with the following BACT requirements:

(a) The Galvanizing Line Alkaline Cleaning station shall be controlled by mist eliminators and the PM emissions shall not exceed 0.003 gr/dscf.

(b) Visible emissions from the Galvanizing Line Alkaline Cleaning station stack shall not exceed 10% opacity, based on a 6-minute average.

(c) Good operating practices shall be observed.

D.20.2 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the Galvanizing Line Alkaline Cleaning Station shall not exceed 54.7 pounds per hour when operating at a process weight rate of 140 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.20.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan (PMP), in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the Galvanizing Line Alkaline Cleaning Station and the mist eliminators.

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.20.4 Mist Eliminators [326 IAC 2-2]

Pursuant to PSD SSM 107-16823-00038, issued November 21, 2003, the mist eliminators for particulate control shall be in operation and control emissions at all times that the Galvanizing Line Alkaline Cleaning Station is in operation.

SECTION D.21 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

COLD MILL – ANNEALING FURNACES

(dd1) Eighteen (18) natural gas-fueled batch Annealing Furnaces, identified as EU-03, constructed in 2001. Each has a heat input capacity of 4.8 MMBtu per hour and a maximum throughput capacity of 200 tons of steel per hour. Emissions are uncontrolled and exhaust to roof vent (S-26).

(dd2) One (1) natural gas-fired annealing furnace, identified as AN-19, approved for construction in 2007, with a heat input capacity of 4.8 MMBtu per hour and a maximum throughput capacity of 200 tons of steel per hour, using propane as a backup fuel, with uncontrolled emissions exhausting to roof vent (S-26).

(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.21.1 Annealing Furnace PSD BACT [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and PSD SSM 107-21359-00038, issued April 27, 2006, the eighteen (18) batch annealing furnaces identified as EU-03 and constructed in 2001 shall comply with the following BACT requirements:

(a) Each batch annealing furnace shall be equipped and operated with low NO_x burners.

(b) The NO_x emissions from each annealing furnace shall not exceed 0.10 lb/MMBtu.

(c) The CO emissions from each annealing furnace shall not exceed 0.084 lb/MMBtu.

(d) The annealing furnaces shall use natural gas as primary fuel and may utilize propane as a back up fuel.

D.21.2 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from each of the nineteen (19) annealing furnaces in the Cold Mill shall not exceed 58.5 pounds per hour when operating at a process weight rate of 200 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.21.3 PSD Limit [326 IAC 2-2]

The input of propane to annealing furnace AN-19, combined with the input of propane to emission units LP #4, LP #7, TD #3, MD #1, MD #2, LDS #1, LP #1, LP #2, LP #3, and LP #5 (permitted in Section D.34) shall be limited to less than 1,089 thousand gallons of propane (LPG) per twelve consecutive month period, with compliance determined at the end of each month. NOx emissions shall not exceed 0.208 pounds per MMBtu when burning propane.

Compliance with this limit will ensure that the potential to emit from the modification performed under SSM 107-23609-00038 is less than forty (40) tons of NOx per year and will render the requirements of 326 IAC 2-2 (PSD) not applicable.

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.21.4 Vendor Certification

The Permittee shall submit the vendor guarantees for the above-mentioned batch annealing furnace which is yet to be installed to demonstrate compliance with Operation Conditions D.23.1(a), (b), and (c).

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

D.21.5 Record Keeping Requirements

(a) To document compliance with Condition D.21.3, the Permittee shall maintain records of the actual quantity of propane (LPG) used in annealing furnace AN-19. Records shall be taken monthly and shall be complete and sufficient to establish compliance with the limit established in Condition D.21.3. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.21.6 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.21.3 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 thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.22 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

INSIGNIFICANT ACTIVITIES – COLD MILL – QUALITY CONTROL/REWIND INSPECTION LINE

Activities with emissions equal to or less than the thresholds provided in 326 IAC 2-7-1(21):

(h) The unwinding and rewinding of steel coil for quality control inspections.

(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.22.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the Quality Control/Rewind Inspection Line shall not exceed 46.3 pounds per hour when operating at a process weight rate of 60 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

SECTION D.23 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

COLD MILL – ACID REGENERATION

(ee) Acid Regeneration system, identified as EU-04, constructed in 1989, consisting of two natural gas fueled tangentially fired burners with a maximum rating of 5.6 MMBtu per hour, and an absorber and cyclone with emissions controlled by its own counter flow packed scrubber (identified as AR scrubber) with mist eliminator exhausting to stack S-31. The counter flow-packed scrubber has a design flow rate of 4,269 acf/min and loading of 0.04 gr/dscf. Propane is used as back up fuel.

Under 40 CFR Part 63, Subpart CCC, this unit is considered an existing acid regeneration 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.23.1 Acid Regeneration PSD BACT [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements) and PSD SSM 107-24348-00038, the acid regeneration system (EU-04) shall comply with the following BACT limits:

(a) The two (2) tangentially fired burners shall burn natural gas as primary fuel and propane as back up fuel.

(b) The gas shall be cleaned in a cyclone, absorber, and a counter flow-packed scrubber prior to being vented to the atmosphere through the exhaust fan and stack.

(c) PM and PM_{10} emissions shall be limited to 7.6 pounds per million cubic feet of natural gas burned, 0.04 pounds per hour and 0.19 tons per year.

(d) NO_x emissions shall be limited to 100 pounds per million cubic feet of natural gas burned, 0.56 pounds per hour, and 2.45 tons per year.

(e) CO emissions shall be limited to 84 pounds per million cubic feet of natural gas burned, 0.47 pounds per hour, and 2.06 tons per year.

(f) Volatile organic compound emissions shall be limited to 5.5 pounds per million cubic feet of natural gas burned, 0.31 pounds per hour, and 1.35 tons per year.

(g) Visible emissions from the acid regeneration scrubber/control system shall not exceed 5% opacity, based on a 6-minute average.

D.23.2 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the acid regeneration system (EU-04) shall not exceed 11.6 pounds per hour when operating at a process weight rate of 4.75 tons per hour.

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the following equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour, and
P = process weight rate in tons per hour

D.23.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan (PMP), in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the acid regeneration system (EU-04) and its control devices.

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.23.4 Scrubber Operation

Pursuant to PSD 107-2764-00038, issued November 30, 1993, the counter flow-packed scrubber shall be in operation and control emissions at all times that the acid regeneration system (EU-04) is in operation.

D.23.5 Testing Requirements [326 IAC 2-7-6(1),(6)][40 CFR Part 63, Subpart CCC][326 IAC 20]

(a) Pursuant to 40 CFR Part 63, Subpart CCC, and PSD 107-16823-00038, issued November 21, 2003, the Permittee shall perform testing to measure the HCl and Cl_2 concentrations utilizing methods specified in 40 CFR Part 63, Subpart CCC or other methods as approved by the Commissioner. The testing shall be performed no later than November 4, 2006.

(b) Any stack which has multiple processes which exhaust to the same stack shall operate all of the processes simultaneously in accordance with 326 IAC 3-5 (Source Sampling Procedures).

(c) These tests shall be repeated at least once every 2.5 years from the date of a valid compliance demonstration.

(d) Testing shall be conducted in accordance with Section C - Performance Testing.

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

D.23.6 Scrubber Monitoring

(a) The Permittee shall continuously monitor the flow rate of the scrubbing liquid and record the flow rate as a 3-hour average. For the purposes of this condition, continuously means no less often than once per minute. When for any one reading, the flow rate is below the minimum of 80 gallons per minute or the minimum established during the latest stack test, the Permittee shall take reasonable steps in accordance with Section C - Response to Excursions or Exceedances. A flow rate reading that is below the above mentioned minimum is not a deviation from this permit. Failure to take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(b) The instruments used for determining the 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 a year.

D.23.7 Scrubber Detection

In the event that a scrubber malfunction 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). Failure to take response steps in accordance with Section C - Response to Excursions or 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.23.8 Record Keeping Requirements

(a) To document compliance with Conditions D.23.6 and D.23.7, the Permittee shall maintain records of:

(1) The continuous flow rate records (on a 3-hour average basis) for the scrubber.

(2) Documentation of all reasonable response steps implemented for every flow rate reading outside of the normal range.

(b) To document compliance with Condition D.23.3, the Permittee shall maintain records of any additional inspections prescribed by the Operation, Maintenance, and Monitoring (OMM) Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.23.9 General Provisions Relating to NESHAP [326 IAC 20-1] [40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.1155, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1, for the Acid Regeneration system, identified as EU-04, as specified in Appendix A of 40 CFR Part 63, Subpart CCC in accordance with schedule in 40 CFR Part 63, Subpart CCC.

D.23.10 National Emissions Standards for Hazardous Air Pollutants for Steel Pickling-HCl Process Facilities and Hydrochloric Acid Regeneration Plants [40 CFR Part 63, Subpart CCC]

Pursuant to 40 CFR Part 63, Subpart CCC, the Acid Regeneration system, identified as EU-04, shall comply with the following provisions:

§ 63.1159 Operational and equipment standards for existing, new, or reconstructed sources.

(a) *Hydrochloric acid regeneration plant.* The owner or operator of an affected plant must operate the affected plant at all times while in production mode in a manner that minimizes the proportion of excess air fed to the process and maximizes the process offgas temperature consistent with producing usable regenerated acid or iron oxide.

§ 63.1160 Compliance dates and maintenance requirements.

(a) *Compliance dates.* (1) The owner or operator of an affected existing steel pickling facility and/or hydrochloric acid regeneration plant subject to this subpart shall achieve initial compliance with the requirements of this subpart no later than June 22, 2001.

(b) *Maintenance requirements.* (1) The owner or operator of an affected source shall comply with the operation and maintenance requirements prescribed under §63.6(e) of subpart A of this part.

(2) In addition to the requirements specified in paragraph (b)(1) of this section, the owner or operator 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 title V permit. All such plans must be consistent with good maintenance practices and, for a scrubber emission control device, must at a minimum:

(i) 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;

(ii) 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;

(iii) Require cleaning of the scrubber internals and mist eliminators at intervals sufficient to prevent buildup of solids or other fouling;

(iv) Require an inspection of each scrubber at intervals of no less than 3 months with:

(A) Cleaning or replacement of any plugged spray nozzles or other liquid delivery devices;

(B) Repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components;

(C) Repair or replacement of droplet eliminator elements as needed;

(D) Repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber; and

(E) Adjustment of damper settings for consistency with the required air flow.

(v) If the scrubber is not equipped with a viewport or access hatch allowing visual inspection, alternate means of inspection approved by the Administrator may be used.

(vi) The owner or operator 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 of this subpart.

(vii) The owner or operator shall maintain a record of each inspection, including each item identified in paragraph (b)(2)(iv) of this section, 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.

(3) The owner or operator of each hydrochloric acid regeneration plant shall develop and implement a written maintenance program. The program shall require:

(i) Performance of the manufacturer's recommended maintenance at the recommended intervals on all required systems and components;

(ii) Initiation of procedures for appropriate and timely repair, replacement, or other corrective action within 1 working day of detection; and

(iii) Maintenance of a daily record, signed by a responsible maintenance official, showing the date of each inspection for each requirement, the problems found, a description of the repair, replacement, or other action taken, and the date of repair or replacement.

§ 63.1161 Performance testing and test methods.

(a) *Demonstration of compliance.* The owner or operator shall conduct an initial performance test for each process or emission control device to determine and demonstrate compliance with the applicable emission limitation according to the requirements in §63.7 of subpart A of this part and in this section.

(1) Following approval of the site-specific test plan, the owner or operator 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 (and Cl_2 for hydrochloric acid regeneration plants) in gases exiting the process or the emission control device (to determine compliance with the applicable emission concentration standard).

(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 or Cl_2 exiting the process or the emission control device is less than or equal to the applicable emission concentration standard.

(b) *Establishment of scrubber operating parameters.* During the performance test for each emission control device, the owner or operator 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 owner or operator shall determine the operating parameter monitoring values as 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 paragraph (a)(2) of this section. An owner or operator may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, an owner or operator may reestablish compliant operating parameter values as part of any performance test that is conducted subsequent to the initial test or tests.

(c) *Establishment of hydrochloric acid regeneration plant operating parameters.* (1) During the performance test for hydrochloric acid regeneration plants, the owner or operator shall establish site-specific operating parameter values for the minimum process offgas temperature and the maximum proportion of excess air fed to the process as described in §63.1162(b)(1) of this subpart. During the emission test, each operating parameter must be monitored and recorded with sufficient frequency to establish a representative average value for that parameter, but no less frequently than once every 15 minutes for parameters that are monitored continuously. Amount of iron in the spent pickle liquor shall be determined for each run by sampling the liquor every 15 minutes and analyzing a composite of the samples. The owner or operator shall determine the compliant monitoring values as the averages of the values recorded during any of the runs for which results are used to establish the emission concentration per paragraph (a)(2) of this section. An owner or operator may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, an owner or operator may reestablish compliant operating parameter values as part of any performance test that is conducted subsequent to the initial test or tests.

(2) During this performance test, the owner or operator of an existing affected plant may establish an alternative concentration standard if the owner or operator can demonstrate to the Administrator's satisfaction that the plant cannot meet a concentration limitation for Cl_2 of 6 ppmv when operated within its design parameters. The alternative concentration standard shall be established through performance testing while the plant is operated at maximum design temperature and with the minimum proportion of excess air that allows production of iron oxide of acceptable quality while measuring the Cl_2 concentration in the process exhaust gas. The measured concentration shall be the concentration standard for that plant.

(d) *Test methods.* (1) The following test methods in appendix A of 40 CFR part 60 shall be used to determine compliance under §63.1157(a), §63.1157(b), §63.1158(a), and §63.1158(b) of this subpart:

(i) Method 1, to determine the number and location of sampling points, with the exception that no traverse point shall be within one inch of the stack or duct wall;

(ii) Method 2, to determine gas velocity and volumetric flow rate;

(iii) Method 3, to determine the molecular weight of the stack gas;

(iv) Method 4, to determine the moisture content of the stack gas; and

(v) 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, and also to determine the concentration of Cl_2 discharged to the atmosphere from acid regeneration plants. 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 (30 dry standard cubic feet). The concentrations of HCl and Cl_2 shall be calculated for each run as follows:

C_{HCl}(ppmv) = 0.659 C_{HCl}(mg/dscm),

and C_{C12}(ppmv) = 0.339 C_{C12}(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.

(2) The owner or operator may use equivalent alternative measurement methods approved by the Administrator.

§ 63.1162 Monitoring requirements.

(a) The owner or operator of a new, reconstructed, or existing steel pickling facility or acid regeneration plant subject to this subpart shall:

(1) Conduct performance tests to measure the HCl mass flows at the control device inlet and outlet or the concentration of HCl exiting the control device according to the procedures described in §63.1161 of this subpart. Performance tests shall be conducted either annually or according to an alternative schedule that is approved by the applicable permitting authority, but no less frequently than every 2 1/2 years or twice per title V permit term. If any performance test shows that the HCl emission limitation is being exceeded, then the owner or operator is in violation of the emission limit.

(2) 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 §63.1160(b)(2) of this subpart.

(3) If an emission control device other than a wet scrubber is used, install, operate, and maintain systems for the measurement and recording of the appropriate operating parameters.

(4) Failure to record each of the operating parameters listed in paragraph (a)(2) of this section is a violation of the monitoring requirements of this subpart.

(5) 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.

(6) The owner or operator may develop and implement alternative monitoring requirements subject to approval by the Administrator.

(b) The owner or operator of a new, reconstructed, or existing acid regeneration plant subject to this subpart shall also install, operate, and maintain systems for the measurement and recording of the:

(1) Process offgas temperature, which shall be monitored continuously and recorded at least once every shift while the facility is operating in production mode; and

(2) Parameters from which proportion of excess air is determined. Proportion of excess air shall be determined by a combination of total air flow rate, fuel flow rate, spent pickle liquor addition rate, and amount of iron in the spent pickle liquor, or by any other combination of parameters approved by the Administrator in accordance with §63.8(f) of subpart A of this part. Proportion of excess air shall be determined and recorded at least once every shift while the plant is operating in production mode.

(3) Each monitoring device must be certified by the manufacturer to be accurate to within 5 percent and must be calibrated in accordance with the manufacturer's instructions but not less frequently than once per year.

(4) Operation of the plant with the process offgas temperature lower than the value established during performance testing or with the proportion of excess air greater than the value established during performance testing is a violation of the operational standard specified in §63.1159(a) of this subpart.

(c) The owner or operator 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.

§ 63.1163 Notification requirements.

(a) *Initial notifications.* As required by §63.9(b) of subpart A of this part, the owner or operator shall submit the following written notifications to the Administrator:

(2) As required by §63.9(b)(2) of subpart A of this part, the owner or operator of an affected source that has an initial startup before June 22, 1999, shall notify the Administrator that the source is subject to the requirements of the standard. The notification shall be submitted not later than October 20, 1999 (or within 120 calendar days after the source becomes subject to this standard), and shall contain the information specified in §§63.9(b)(2)(i) through 63.9(b)(2)(v) of subpart A of this part.

(b) *Request for extension of compliance.* As required by §63.9(c) of subpart A of this part, if the owner or operator of an affected source cannot comply with this standard by the applicable compliance date for that source, or if the owner or operator has installed BACT or technology to meet LAER consistent with §63.6(i)(5) of subpart A of this part, he/she may submit to the Administrator (or the State with an approved permit program) a request for an extension of compliance as specified in §§63.6(i)(4) through 63.6(i)(6) of subpart A of this part.

(c) *Notification that source is subject to special compliance requirements.* As required by §63.9(d) of subpart A of this part, an owner or operator of a new source that is subject to special compliance requirements as specified in §§63.6(b)(3) and 63.6(b)(4) of subpart A of this part shall notify the Administrator of his/her compliance obligations not later than the notification dates established in §63.9(b) of subpart A of this part for new sources that are not subject to the special provisions.

(d) *Notification of performance test.* As required by §63.9(e) of subpart A of this part, the owner or operator of an affected source shall notify the Administrator 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 the Administrator to review and approve the site-specific test plan required under §63.7(c) of subpart A of this part and, if requested by the Administrator, to have an observer present during the test.

(e) *Notification of compliance status.* The owner or operator of an affected source shall submit a notification of compliance status as required by §63.9(h) of subpart A of this part when the source becomes subject to this standard.

§ 63.1164 Reporting requirements.

(a) *Reporting results of performance tests.* As required by §63.10(d)(2) of subpart A of this part, the owner or operator of an affected source shall report the results of any performance test as part of the notification of compliance status required in §63.1163 of this subpart.

(b) *Progress reports.* The owner or operator of an affected source who is required to submit progress reports under §63.6(i) of subpart A of this part shall submit such reports to the Administrator (or the State with an approved permit program) by the dates specified in the written extension of compliance.

(c) *Periodic startup, shutdown, and malfunction reports.* Section 63.6(e) of subpart A of this part requires the owner or operator of an affected source 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 times, 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) *Plan.* As required by §63.6(e)(3) of subpart A of this part, the owner or operator 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) *Reports.* As required by §63.10(d)(5)(i) of subpart A of this part, if actions taken by an owner or operator 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 owner or operator shall state such information in a semiannual report. The report, to be certified by the owner or operator 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) *Immediate Reports.* Any time an action taken by an owner or operator 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 owner or operator shall comply with all requirements of §63.10(d)(5)(ii) of subpart A of this part.

§ 63.1165 Recordkeeping requirements.

(a) *General recordkeeping requirements.* As required by §63.10(b)(2) of subpart A of this part, the owner or operator shall maintain records for 5 years from the date of each record of:

(1) The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);

(2) The occurrence and duration of each malfunction of the air pollution control equipment;

(3) All maintenance performed on the air pollution control equipment;

(4) Actions taken during periods of startup, shutdown, and malfunction and the dates of such actions (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when these actions are different from the procedures specified in the startup, shutdown, and malfunction plan;

(5) All information necessary to demonstrate conformance with the startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. This information can be recorded in a checklist or similar form (see §63.10(b)(2)(v) of subpart A of this part);

(6) 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;

(7) All results of initial or subsequent performance tests;

(8) If the owner or operator has been granted a waiver from recordkeeping or reporting requirements under §63.10(f) of subpart A of this part, any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements;

(9) If the owner or operator has been granted a waiver from the initial performance test under §63.7(h) of subpart A of this part, a copy of the full request and the Administrator's approval or disapproval;

(10) All documentation supporting initial notifications and notifications of compliance status required by §63.9 of subpart A of this part; and

(11) Records of any applicability determination, including supporting analyses.

(b) *Subpart CCC records.* (1) In addition to the general records required by paragraph (a) of this section, the owner or operator shall maintain records for 5 years from the date of each record of:

(i) Scrubber makeup water flow rate and recirculation water flow rate if a wet scrubber is used;

(ii) Calibration and manufacturer certification that monitoring devices are accurate to within 5 percent; and

(iii) Each maintenance inspection and repair, replacement, or other corrective action.

(2) The owner or operator of an acid regeneration plant shall also maintain records for 5 years from the date of each record of process offgas temperature and parameters that determine proportion of excess air.

(3) The owner or operator shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Administrator for the life of the affected source or until the source is no longer subject to the provisions of this subpart. In addition, if the operation and maintenance plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the plan on record to be made available for inspection by the Administrator for a period of 5 years after each revision to the plan.

(c) *Recent records.* General records and subpart CCC records for the most recent 2 years of operation must be maintained on site. Records for the previous 3 years may be maintained off site.

Table 1 to Subpart CCC of Part 63—Applicability of General Provisions (40 CFR Part 63, Subpart A) to Subpart CCC

Reference	Applies to Subpart CCC	Explanation
63.1-63.5	Yes.	
63.6 (a)-(g)	Yes.	
63.6 (h)	No	Subpart CCC does not contain an opacity or visible emission standard.
63.6 (i)-(j)	Yes.	
63.7-63.9	Yes.	
63.10 (a)-(c)	Yes.	
63.10 (d) (1)-(2)	Yes.	
63.10 (d)(3)	No	Subpart CCC does not contain an opacity or visible emission standard.
63.10 (d) (4)-(5)	Yes.	
63.10 (e)-(f)	Yes.	
63.11	No	Subpart CCC does not require the use of flares.
63.12-63.15	Yes	

D.23.11 One Time Deadlines Relating to National Emission Standards for Hazardous Air Pollutants for Steel Pickling, HCl Process Facilities, and Hydrochloric Acid Regeneration Plants [40 CFR Part 63, Subpart CCC]

(a) The Permittee must conduct the initial performance tests within 60 days after achieving maximum production rate, but no later than 180 days after start-up.

(b) The Permittee must submit a notification of compliance status report for pickle line PL1 no later than October 20, 1999.

SECTION D.24 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

COLD MILL – GALVANIZING LINE

(ff) Thirty six (36) Main Burners, identified as PHB #1 – PHB #36, constructed in 1992, and modified in 2002, input capacity of 1.622 MMBtu per hour each, and three (3) Auxiliary Burners, each with a heat input capacity of 0.1 MMBtu per hour in the preheat furnace section of the galvanizing line using natural gas rated at maximum total capacity of 58.7 MMBtu per hour. The main burners exhaust to stack S-27. The three (3) Auxiliary Burners exhaust to the atmosphere. The NOx emissions are controlled by a Selective Catalytic Reduction/Selective Non-Catalytic Reduction (SCR/SNCR) Systems. Exhausts to roof ventilation. The galvanizing line has an electric static oiler. A continuous emissions monitor (CEM) is used to monitor NOx emissions.

(gg) Additional burners as follows:

(1) Forty four (44) Burners, identified as RB#1 – RB#44, constructed in 2002, each with a heat input capacity of 0.323 MMBtu per hour in radiant tube section with a maximum total capacity of 14.2 MMBtu per hour and option to replace non-conforming burners. The NOx emissions are controlled by SCR System. Exhausts to stack S-27. The SCR/SNCR and SCR systems shall be referred to collectively as the SCR/SNCR system.

(2) One (1) auxiliary burner with a maximum heat input of 3.2 MMBtu/hr in the Alkaline Cleaning Section. The burner is natural gas fired and use propane as backup.

(3) Two (2) auxiliary burners with a maximum heat input of 1.5 MMBtu/hr each in the Strip Dryer Section. The burners are natural gas fired and use propane as backup.

(4) Four (4) auxiliary burners with a maximum heat input of 0.052 MMBtu/hr each in the Pot Roll Heater. The burners are natural gas fired and use propane as backup.

(5) Two (2) emergency burners with a maximum heat input of 0.58 MMBtu/hr each in the Zinc Pot Section. The burners are natural gas fired and use propane as backup.

(6) Two (2) auxiliary burners with a maximum heat input of 0.013 MMBtu/hr each in the Preheat open end burners section. The burners are natural gas fired and use propane as backup.

The SCR/SNCR and SCR systems shall be referred to collectively as the SCR/SNCR system.

(hh) One (1) Zinc Coating pot, identified as ZP#1, constructed in 1992, with a maximum capacity of 140 tons of steel per hour, uncontrolled and exhausting to the atmosphere.

(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.24.1 Nitrogen Oxides (NOx) – PSD BACT [326 IAC 2-2-3]

(a) Pursuant to 326 IAC 2-2-3, Agreed Order 2000-8861-A, and PSD SSM 107-14297-00038, issued June 6, 2002, the total nitrogen oxide(s) (NOx) emissions from the 36 Main Burners, each at 1.622 MMBtu per hour and 3 Auxiliary Burners, each at 0.1 MMBtu per hour in the preheat furnace section of the galvanizing line shall not exceed 2.9 pounds per hour which is equivalent to 50 pounds per million standard cubic feet of natural gas used on a twenty four (24) operating hour block average.

(b) Pursuant to 326 IAC 2-2-3, Agreed Order 2000-8861-A, and PSD SSM 107-14297-00038, issued June 6, 2002, the total nitrogen oxide(s) (NOx) emissions from the 44 Burners, each at 0.323 MMBtu per hour in the radiant tube section of the galvanizing line shall not exceed 2.8 pounds per hour which is equivalent to 200 pounds per million standard cubic feet of natural gas used on a twenty four (24) operating hour block average.

(c) During the Startup and Shutdown period, the SCR/SNCR operations are exempt from complying with the above limits for this duration. The Permittee shall not produce more than incidental product during the Startup and Shutdown period from the Galvanizing line.

(d) During the refractory lining drying period, the SCR/SNCR operations are exempt from complying with the above limits for this duration. The Permittee shall not produce more than incidental product during the refractory lining drying period from the Galvanizing line.

D.24.2 Particulate Matter (PM/PM-10) PSD BACT Limits [326 IAC 2-2-3]

(a) Pursuant to 326 IAC 2-2-3 and PSD SSM 107-14297-00038, issued June 6, 2002, the total PM and PM10 (where PM10 includes filterable and condensable components) emissions from the 36 Main Burners, each at 1.622 MMBtu per hour, and the 3 Auxiliary Burners, each at 0.1 MMBtu per hour in the preheat furnace section of the galvanizing line shall not exceed 1.9 and 7.6 pounds per million standard cubic feet of natural gas usage respectively and use good combustion practices.

(b) Pursuant to 326 IAC 2-2-3 and PSD SSM 107-14297-00038, issued June 6, 2002, the total PM and PM10 (where PM10 includes filterable and condensable components) emissions from the 44 Burners, each at 0.323 MMBtu per hour in the radiant tube section of the galvanizing line shall not exceed 1.9 and 7.6 pounds per million standard cubic feet of natural gas usage respectively and use good combustion practices.

(c) This limit in the permit accounts for PM10 emissions (where PM10 includes filterable and condensable components) from the combustion of natural gas only. The ammonia slip may cause elevated PM10 emissions. If in a latter stack test higher PM10 emissions are observed, the Permittee shall request for a review of this limit as part of the a new BACT evaluation.

D.24.3 Carbon Monoxide (CO) – PSD BACT [326 IAC 2-2-3]

Pursuant to 326 IAC 2-2-3 and PSD SSM 107-14297-00038, issued June 6, 2002, the CO emissions from the 36 Main Burners, each at 1.622 MMBtu per hour, the 3 Auxiliary Burners, each at 0.1 MMBtu per hour in the preheat furnace section, and 44 Burners, each at 0.323 MMBtu per hour in the radiant tube section of the galvanizing line shall not exceed 84 pounds per million standard cubic feet of natural gas usage using good combustion practices.

D.24.4 Volatile Organic Compounds (VOC) – PSD BACT [326 IAC 2-2-3]

Pursuant to 326 IAC 2-2-3 and PSD SSM 107-14297-00038, issued June 6, 2002, the VOC emissions from the 36 Main Burners, each at 1.622 MMBtu per hour, the 3 Auxiliary Burners, each at 0.1 MMBtu per hour in the preheat furnace section, and 44 Burners, each at 0.323 MMBtu per hour in the radiant tube section of the galvanizing line shall not exceed 5.5 pounds per million standard cubic feet of natural gas usage using good combustion practices.

D.24.5 Ammonia Limitations [326 IAC 2-1.1-5]

Pursuant to 326 IAC 2-1.1-5 and PSD SSM 107-14297-00038, issued June 6, 2002, the ammonia emissions from the galvanizing line SCR systems stack shall not exceed twenty-five (25) ppmvd corrected to 15% O_2.

D.24.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan (PMP), in accordance with Section B - Preventive Maintenance Plan, is required for the galvanizing line burners and their control device.

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

D.24.7 Nitrogen Oxides (NOx) [326 IAC 2-2-3]

Pursuant to 326 IAC 2-2-3, Agreed order 2000-8861-A, and PSD SSM 107-14297-00038, issued June 6, 2002, the SCR/SNCR on the preheat furnace and SCR on the radiant tube section of the Galvanizing line shall be in operation and control emissions from the burners at all times they are in operation. The SCR/SNCR systems shall be operated as recommended by the manufacturer to minimize the NOx emissions and ammonia slip.

D.24.8 Oxides of Nitrogen NOx (SCR operation) [326 IAC 2-2]

From the date of the valid stack test, which was March 9, 2001, during a startup, the Permittee shall start urea injection in the SCR/SNCR unit to control NOx emissions from the galvanizing line, as soon as the catalyst bed reaches 500°F, the optimum catalyst temperature determined during the March 9, 2001 stack test.

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

D.24.9 Nitrogen Oxides (NOx) Emissions Monitoring [326 IAC 3-5] [326 IAC 7-2-1(g)]

Pursuant to 326 IAC 2-5.1-3 and 326 IAC 2-2:

(a) The Permittee shall install a continuous emissions monitoring system or alternative monitoring plan as allowed under the Clean Air Act and 326 IAC 3-5-1(d).

(b) The Permittee shall install, calibrate, certify, operate and maintain a continuous emissions monitoring system to monitor NOx emissions, in accordance with 326 IAC 3-5-2 through 326 IAC 3-5-7.

(1) The continuous emissions monitoring system (CEMS) shall measure the NOx emission rate in pounds per hour. The use of CEMS to measure and record the hourly NOx emission rates over a twenty-four (24) operating hour block averaging period is sufficient to demonstrate compliance with the limits established in the Conditions D.24.1(a) and D.24.1(b). The source shall maintain records of emission rates in pounds per hour.

(2) The Permittee shall submit to IDEM, OAQ, within ninety (90) days after the monitor installation, a complete written continuous monitoring standard operating procedure (SOP), in accordance with the requirements of 326 IAC 3-5-4.

(3) Relative accuracy tests and routine quarterly audits shall be performed in accordance with the contents of the standard operating procedures pursuant to 326 IAC 3-5-5.

(4) The Permittee shall record the output of the system and shall perform the required record keeping, pursuant to 326 IAC 3-5-6, and reporting, pursuant to 326 IAC 3-5-7.

(5) The source may submit to the OAQ alternative emission factors based on the source's CEMS data (collected over one (1) season of operation; where a season is defined as the period of time from May 1 through September 30) and the corresponding site temperatures, to use in lieu of the vendor provided emission factors in instances of downtime. The alternative emissions factors must be approved by the OAQ prior to use in calculating emissions for the limitations established in this permit. The alternative emission factors shall be based upon collected monitoring and test data supplied from an approved continuous emissions monitoring system. In the event that the information submitted does not contain sufficient data to establish appropriate emission factors, the source shall continue to collect data until appropriate emission factors can be established.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.24.10 Record Keeping Requirements

(a) To document compliance with Conditions D.24.1(a), D.24.1(b), and D.24.9, the Permittee shall maintain records of the continuous emission monitoring data in accordance with 326 IAC 3-5.

(b) All records shall be maintained in accordance with Section C – General Record Keeping Requirements of this permit.

D.24.11 Reporting Requirements

The Permittee shall submit the following information on a quarterly basis:

(a) Records of excess NOx emissions (defined in 326 IAC 3-5-7 and 40 Part 60.7) from the continuous emissions monitoring system. These reports shall be submitted within thirty (30) calendar days following the end of each calendar quarter and in accordance with Section C – General Reporting Requirements of this permit.

(b) A quarterly summary of the CEMs data used to document compliance with Conditions D.24.1(a) and D,24.1(b) shall be submitted to the address listed in Section C – General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported.

SECTION D.25 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

INSIGNIFICANT ACTIVITIES – WELDING

(i) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment including the galvanizing line welder.

(j) Structural steel and bridge fabrication activities using 80 tons or less of welding consumables.

(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.25.1 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the brazing equipment, cutting torches, soldering equipment, welding equipment, and structural steel and bridge fabrication activities shall not exceed a pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission is pounds per hour and
P = process weight rate in tons per hour

SECTION D.26 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

INSIGNIFICANT ACTIVITIES – MISCELLANEOUS SHEARS AND SIDE TRIMMERS

Activities with emissions equal to or less than the thresholds provided in 326 IAC 2-7-1(21):

(k) Various shears located at various sites throughout the facility.

(l) Three (3) side trimmers in total. The side trimmers are located at the skin pass mill and at both pickle lines. Various side trimmers located at various sites throughout the facility.

(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.26.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate emissions from the shears and side trimmers shall not exceed a pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission is pounds per hour and
P = process weight rate in tons per hour

SECTION D.27 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

HOT STRIP MILL & TUNNEL FURNACE SYSTEM

(ii) The Hot Strip Mill, identified as HSM, constructed in 1989, with a maximum capacity of 502 tons/hour consisting of various rolling mill processes: Shearing, Descaling, Finishing, Rollout Table, Coilers, Skin Pass Mill and Roll Grinders. Parts of the Hot Mill Strip are controlled by water roll cooling.

(jj) Tunnel Furnace System, identified as EU-02, constructed in 1989, with a maximum capacity of 502 tons/hour, with a maximum total heat input capacity of 200 MMBtu per hour, emissions uncontrolled, tunnel furnace 1 exhausts to stack S13 and S14, tunnel furnace 2 exhausts to stack S15, and consisting of:

(1) Tunnel Furnace 1 – Natural gas fired with a heat input capacity of 84 MMBtu per hour. Tunnel Furnace 1 was constructed in 1989 as part of the original Tunnel Furnace System.

(2) Tunnel Furnace 2 – Natural gas fired with a heat input capacity of 84 MMBtu per hour. Tunnel Furnace 2 was constructed in 1994.

(3) Shuttle Furnaces 1 and 2 – Natural gas fired with a heat input capacity of 13 MMBtu per hour each using low NOx burners. Shuttle Furnaces 1 and 2 were constructed in 1994 and approved for a burner replacement in 2008.

(4) Snub Furnace – Natural gas fired with a heat input capacity of 6 MMBtu per hour. The snub furnace was constructed in 1989 and modified in 1994.

(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.27.1 Hot Strip Mill PSD BACT [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and PSD 107-2764-00038, issued on November 30, 1993, revised by PSD SSM 107-16823-00038, issued November 21, 2003, the Hot Strip Mill (HSM) shall comply with the following BACT requirements:

(a) The rolling mill in the Hot Strip Mill shall be operated using water roll cooling sprays with any PM, in solid or liquid form, collected in flumes and transported to the scale pit.

(b) PM and PM10 emissions from the Hot Strip Mill process shall be limited to 0 pound per hour.

(c) Fugitive emissions generated at the Hot Strip Mill shall not exceed 0% opacity when emitted from any roof monitor or building opening, based on a 6-minute average.

(d) The VOC emissions from the Hot Strip Mill (HSM) shall not exceed 0.06 lb/ton of steel produced.

D.27.2 Tunnel Furnace System PSD BACT [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and PSD 107-3702-00038, issued March 28, 1995, tunnel furnaces No. 1 and No. 2, shuttle furnaces No. 1 and No. 2, and the snub furnace, shall comply with the following requirements:

(a) NOx emissions from tunnel furnaces No. 1 and No. 2 shall be limited to 190 pounds per million cubic feet of natural gas burned.

(b) NOx emissions from shuttle furnaces No. 1 and No. 2 shall be limited to 100 lbs per million cubic feet of natural gas burned.

(c) Tunnel furnaces No. 1 and No. 2, shuttle furnaces No. 1 and No. 2, and the snub furnace shall burn natural gas as primary fuel and propane as back up fuel.

(d) Shuttle furnaces No. 1 and No. 2 shall be equipped and operated with low NOx burners.

Pursuant to 326 IAC 2-2 and PSD 107-5235-00038, issued June 20, 1996, the snub furnace shall comply with the following requirements:

(a) The NOx emissions from the snub furnace shall be limited to 190 lbs per million cubic feet of natural gas burned.

(b) The snub furnace shall be equipped and operated with low NOx burners.

D.27.3 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the Tunnel Furnace System (EU-02) shall not exceed 69.0 pounds per hour when operating at a process weight rate of 502 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

SECTION D.28 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

HOT STRIP MILL – ANNEALING FURNACES

(kk) Four (4) natural gas-fired annealing furnaces using propane as a backup fuel, identified as HM #1-HM #4, each with a maximum heat input capacity of 14.505 MMBtu per hour. Emissions are controlled by low NOx burners and exhaust to the atmosphere. HM#1 and HM#2 were installed in 2006. HM#3 and HM#4 were not installed yet.

(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.28.1 Nitrogen Oxides (NOx) [326 IAC 2-7-5]

Pursuant to 326 IAC 2-7-5, MSM 107-21527-00038, issued September 23, 2005, and MPM 107-21907-00038, issued May 24, 2006:

(a) The input of the natural gas to the annealing furnaces shall be limited to less than 501.3 million cubic feet of natural gas per 12 consecutive month period, with compliance determined at the end of each month. NOx emissions shall not exceed 0.098 lb NOx/MMBtu.

(b) For purposes of determining compliance with the fuel usage limit, 5.22 thousand gallons of propane (LPG) shall be equivalent to one million cubic feet of natural gas.

(c) When combusting propane, NOx emissions shall not exceed 0.208 lb NOx/MMBtu.

D.28.2 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from each annealing furnace (HM #1, HM #2, HM #3, and HM #4) in the Hot Mill shall not exceed 59.0 pounds per hour when operating at a process weight rate of 210 tons per hour each.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.28.3 Record Keeping Requirements

(a) Actual type and quantity of fuel used (including gallons of propane, cubic feet of natural gas, and equivalent thousand gallons of propane LPG as million cubic feet of natural gas), since the last compliance determination period; and

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.28.4 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.28.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarterly period being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-1.1-1(1).

SECTION D.29 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

INSIGNIFICANT ACTIVITIES – DEGREASING

(m) Activities with emissions equal to or less than the thresholds provided in 326 IAC 2-7-1(21) consisting of: Degreasing operations, identified as DG, with a maximum throughput greater than 145 gallons per 12 months, uncontrolled and exhausting to the atmosphere.

(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.29.1 Cold Cleaner Operation [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2, the Permittee shall do the following with respect to unit DG:

(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 operating 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 to the atmosphere.

SECTION D.30 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

MELT SHOP – MATERIAL TRANSFER STATION

(ll) Material transfer station #1, located inside the building exhausting to general ventilation, which will service both the EAFs and the LMFs, used to transfer various types and grades of lime, carbon, foamy slag, scrap, scrap substitutes, and other alloys from rail cars. Railcars are unloaded to trucks, silos, or the meltshop alloy handling system. Identified as MT #1, constructed in 2003, and consisting of:

(1) Rail car bottom unloading through a rubber boot to a conveyor with emissions uncontrolled.

(2) One (1) totally enclosed conveyor, identified as MTC, constructed in 2003, with emissions controlled by a bin vent dust collector and exhausting to stack S-45.

(3) One (1) loading spout connected to the load truck with emissions uncontrolled.

(mm) Material transfer station #2, located outside the building and exhausting to the atmosphere, which services the EAFs and the LMFs, used to transfer various types and grades of lime, carbon, foamy slag, scrap, scrap substitutes, and other alloys from rail cars. Railcars are unloaded to trucks, silos, or the meltshop alloy handling system. Identified as MT #2, constructed in 2006, and consisting of:

(1) Ten (10) storage silos, each controlled by individual bin vent filters or the Meltshop EAF baghouses (1 and 2).

(2) One (1) rail unloading operation under a roof.

(3) One (1) truck dumping station enclosed by a three sided building.

(4) One (1) loader dumping station enclosed by a three sided building.

(5) Associated enclosed conveyors.

(6) Storage bins.

(7) Misc. feed equipment and controls.

(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.30.1 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the material transfer station (MT #1) shall not exceed 55.4 pounds per hour when operating at a process weight rate of 150 tons per hour. The pounds per hour limitation was calculated using the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.30.2 Particulate Control Equipment Operation [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and PSD SSM 107-16823-00038, issued November 21, 2003, amended via 107-21611-00038 issued August 24, 2005, each silo shall be controlled by the Meltshop EAF Baghouses (1 and/or 2) or individual bin vent filters, with the following specifications: each bin vent filter will have an outlet grain loading of 0.01 grains per dry standard cubic foot.

D.30.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan (PMP), in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for the material transfer station (MT #1) and its control devices.

Compliance Determination Requirements

D.30.4 Particulate Control

(a) The bin vent dust collector for particulate control shall be in operation and control emissions from the totally enclosed conveyor (MTC) at all times that the MTC 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.

SECTION D.31 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

MELTSHOP– ELECTRIC ARC FURNACES, ARGON OXYGEN DECARBURIZATION (AOD) VESSELS, DESULFURIZATION, CONTINUOUS CASTERS, EAF DUST TREATMENT FACILITY

(nn) Two (2) Meltshop Electric Arc Furnaces (EAFs), identified as EAF #1 and EAF #2, constructed in 1989 and approved for modification in 2007 to replace the furnace bottoms. EAF #1 consists of three (3) co-jet oxyfuel burner/lance, each has a rated capacity of 6 megawatt constructed in 1989, and one (1) co-jet oxyfuel burner/lance, with rated capacity of 10 megawatt using oxygen, natural gas and propane as backup fuels, approved for construction in 2007. EAF #2 consists of three (3) co-jet oxyfuel burner/lance, each has a rated capacity of 6 megawatt constructed in 1989, and one (1) co-jet oxyfuel burner/lance, with rated capacity of 10 megawatt using oxygen, natural gas and propane as backup fuels, approved for construction in 2007. EAF #1 consists of three (3) carbon injectors with total maximum rated capacity of 1000 pounds per minute and EAF #2 consists of three (3) carbon injectors with total maximum rated capacity of 1000 pounds per minute constructed in 1989. Together the EAFs and the Argon Oxygen Decarburization (AOD) have a maximum capacity of 502 tons/hour, with emissions controlled by multi compartment reverse air type baghouses (identified as Meltshop EAF Baghouse1 and Meltshop EAF Baghouse2). In addition the EAFs have the following associated equipment:

(1) Seven (7) small charge buckets, five (5) buckets constructed in 1989 and two (2) charge buckets approved for construction in 2007.

(2) Three (3) additional large charge buckets used for single furnace charges on both EAFs, approved for construction in 2007.

(3) Twenty-five (25) EAFs ladles, twenty-one (21) constructed in 1989, four (4) ladles approved for construction in 2007.

(4) EAF charge handling currently utilizing two (2) overhead cranes with magnets and a conveyor to load charge buckets constructed in 1989 and approved for modification in 2007 with the addition of 2 new scrap cranes with magnetics, enhancement of existing cranes and/or magnetics, use of rail and/or truck dump and loader operations and the use of mobile cranes to load charge buckets in the scrap yard.

(5) Flux and alloy material handling system for direct feeding of alloys, lime, carbon, scrap substitutes and other related materials to the EAFs constructed in 1989 and approved for modification in 2007 with the addition of bulk loading of material to the system in a three-sided building.

A continuous emission monitor (CEM) is used to monitor NOx, CO, and SO_2 emissions from the EAFs.

Under 40 CFR Part 60, Subpart AAa, these units are considered electric arc furnaces.

(1) The EAFs also utilize the following technologies:

(A) A direct shell evacuation (DSE) control system ("a fourth hole duct"),

(B) An overhead roof exhaust system consisting of canopy hoods,

(C) Oxy fuel burners, and

(2) Each or any combination of the Meltshop EAFs and AOD can independently produce the maximum capacity of 502 tons/hour of steel. Each Meltshop EAF can operate

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concurrently or independently to achieve this maximum capacity.

(3) Both the Meltshop EAF Baghouse1 and Meltshop EAF Baghouse2 capture the emissions from the Meltshop EAFs, AOD vessel, Desulfurization, Meltshop Continuous Casters and other miscellaneous sources.

Each Meltshop Baghouse can sufficiently control emissions independently.

Each Meltshop EAF Baghouse serves as a back up control to the Meltshop LMFs.

(A) The Meltshop EAF Baghouse1 is a multi compartment positive pressure baghouse, has a design air flow rate of 1,527,960 actual cubic foot/min (acf/min) and an outlet PM loading of 0.0018 grains/dry standard cubic foot (gr/dscf).

This Meltshop EAF Baghouse1 exhausts to a roof vent/monitor identified as vent BH1.

(B) The Meltshop EAF Baghouse2 is a multi compartment positive pressure baghouse, has a design flow rate of 915,000 dscf/min and 1,200,000 acf/min and an outlet PM loading of 0.0018 gr/dscf.

This Meltshop EAF Baghouse2 exhausts to a stack identified as BH2.

(4) The fugitive emissions generated during the furnace operations are captured by the Meltshop Roof Canopies or contained within the Meltshop Building.

(5) The Meltshop roof monitors include exhausts from the ladle preheaters, ladle dryers, tundish preheaters, tundish dryers, ladle lancing station, tundish dumping, fugitive emissions from the LMFs, fugitive emissions from the Meltshop Casters and other Meltshop operations.

(oo) One (1) Argon oxygen decarburization (AOD) vessel, identified as AOD1, constructed in 1995, and approved for modification in 2007 with the addition of one (1) AOD vessel, identified as AOD2 with a capacity of 160 tons/hour, one (1) top lance for both AODs, rated at 300,000 cubic feet/hour of oxygen, and one (1) rebricking station. Together the AODs and the Meltshop EAFs have a total maximum capacity of 502 tons/hour, with emissions controlled by the Meltshop EAF Baghouse1 which exhausts to a roof vent/monitor identified as vent BH1, and Meltshop EAF Baghouse2 which exhausts to stack BH2. Only one (1) AOD vessel can operate at a time.

Under 40 CFR Part 60, Subpart AAa, these units are considered argon-oxygen decarburization vessels.

(pp) Desulfurization (DS) is an additional step in the Meltshop operations that remove sulfur. It has a maximum capacity of 502 tons of metal per hour.

(qq) Two (2) Meltshop Continuous Casters, identified as CC #1 and CC #2, CC #1 was constructed in 1989, CC #2 was constructed in 1994, with total maximum capacity of 502 tons/hour, with emissions controlled by the Meltshop EAF Baghouse1 identified as vent BH1 which exhausts to a roof vent/monitor or Meltshop EAF Baghouse2 which exhausts to stack BH2. The steam from the Meltshop Continuous Casters exhausts through stack S-11.

(rr) An EAF dust treatment facility, identified as DTF, constructed in 2004, with a capacity of 100,000 lb/hour, with emission control by bin vents for the silos, scrubber for dust treatment and baghouse for truck loading. Dust transfer will also occur inside the building.

Under 40 CFR Part 60, Subpart AAa, this unit is considered a dust handling system. Options for

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the dust transfer are:

(1) from silo to truck through a loading spout,

(2) from silo to railcar through a loading spout,

(3) From silo to truck through a loading spout to transfer to the existing Meltshop EAF Baghouses. Unloading from the truck at the existing Meltshop EAF Baghouses also occurs in the building, transferring the dust through augers and a bucket elevator to the existing silo. In this option, the existing EAF dust treatment will have a maximum capacity of 100,000 lb/hr.

(4) Treating dust at the new silo and transferring to a truck. No loading spout is necessary because the material is no longer dusty, as treated.

The EAF dust treatment facility consists of the following:

(A) One (1) lime storage silo, identified as HRE #1, constructed in 1999, with a maximum capacity of 109 tons, emissions controlled by a bin vent filter, and exhausting to stack HR/E-2. Lime is pneumatically loaded to the silo at a maximum transfer rate of 40,000 pounds per hour.

(B) One (1) pugmill, identified as PM, constructed in 1999, with a maximum capacity of 100,000 pounds per hour, emissions controlled by one (1) cyclone in series with one (1) venture scrubber, and exhausting to stack HR/E-1. Lime is transferred to the pugmill via a screw conveyor system at a maximum transfer rate of 5,100 pounds per hour and EAF dust is transferred to the pugmill via gravity through an enclosed cone bottom loading spout at a maximum transfer rate of 100,000 pounds 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)]

D.31.1 Meltshop EAF Baghouses PSD BACT [326 IAC 2-2]

(a) Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements) and PSD/SSM 107-24348-00038, the Permittee shall comply with the following BACT requirements:

(1) The Meltshop EAF Baghouses (1 and 2) shall capture and control the emissions from the Meltshop EAFs, AOD vessels, Desulfurization station, and Meltshop Continuous Casters (EAF #1, EAF #2, AODs, DS, CC #1, and CC #2).

(2) Steel production shall not exceed 4,397,520 tons of steel poured/tapped per 12-consecutive month period with compliance demonstrated at the end of each month.

(3) The total sulfur dioxide (SO_2) emissions from the Meltshop EAF Baghouses (1 and 2), controlling the two (2) EAFs, AOD, desulfurization station, two (2) Continuous Casters and LMF EU-13 (c) shall not exceed 0.25 pound per ton of steel produced and 125 pounds of SO_2 per hour, based on a 3-hour block average.

(4) The total nitrogen oxide (NO_x) emissions from the Meltshop EAF Baghouses (1 and 2) controlling the two (2) EAFs, AOD, desulfurization station, two (2) Continuous Casters and LMF EU-13 (c) shall not exceed 0.35 pounds per ton of steel produced and 175.7 pounds of NO_x per hour.

(5) The total carbon monoxide (CO) emissions from the Meltshop EAF Baghouses (1 and 2) controlling the two (2) EAFs, AOD, desulfurization station, two (2) Continuous Casters and LMF EU-13 (c) shall not exceed 2.0 pounds per ton of steel produced and 1,004 pounds of CO per hour, based on a 3-hour block average.

(6) The total volatile organic compound (VOC) emissions from the Meltshop EAF Baghouses (1 and 2) controlling the two (2) EAFs, AOD, desulfurization station, two (2) Continuous Casters and LMF EU-13 (c) shall not exceed 0.09 pound per ton of steel produced and 45.18 pounds of VOC per hour, based on a 3-hour block average.

(7) Filterable particulate matter (PM) emissions from the Meltshop EAF Baghouses (1 and 2) controlling the two (2) EAFs, AOD, desulfurization station, two (2) Continuous Casters and LMF EU-13 (c) shall not exceed 0.0018 grains/dscf.

(8) Filterable and condensible PM_{10} emissions from the Meltshop EAF Baghouses (1 and 2) controlling the two (2) EAFs, AOD, desulfurization station, two (2) Continuous Casters and LMF EU-13 (c) shall not exceed 0.0052 grains/dscf.

(9) The visible emissions from each Meltshop EAF Baghouse shall not exceed 3% opacity, based on a 6-minute average.

(10) Visible emissions from the Meltshop Roof Monitors shall not exceed 5% opacity, based on a 6-minute average.

(11) Fugitive emissions generated at each EAF (EAF #1 and EAF #2) during each complete cycle from tap to tap shall not exceed 3% opacity when emitted from any roof monitor or building opening, based on a 6-minute average.

(12) Good working practices shall be observed such as following various tapping, melting and refining practices.

(b) Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements), the Permittee shall comply with the following BACT requirements:

(1) The Argon-Oxygen Decarburization (AOD) Dryout and Preheat Burner shall be limited as follows: 100 percent of all PM/PM10 fugitive emissions generated during the operation of the AOD Dryout and Preheat burner shall be captured by the roof canopy in the North Furnace Bay or contained and collected within the North Furnace Bay.

(2) The AOD Dryout and Preheat Burner is limited solely to the use of natural gas and limited to 20.0 million Btu per hour heat input.

(3) That all equipment consuming natural gas as the fuel source shall be limited to the use of a propane-air mixture as the alternative backup source.

(4) NOx emissions shall be limited to 140 pounds per million cubic feet of natural gas burned, 2.8 pounds per hour, and 12.3 tons per year.

D.31.2 Operational Flexibility [326 IAC 2-2]

Pursuant to 326 IAC 2-2, the Permittee shall comply with the following requirements:

(a) Each or any combination of the Meltshop EAFs and AOD (EAF #1, EAF #2, and AODs) may independently produce the maximum capacity of 502 tons/hour of steel. Each

Meltshop EAF can operate concurrently or independently to achieve this maximum capacity.

(b) Only 1 AOD vessel (AODs) shall operate at a time.

(c) Each Meltshop Baghouse can sufficiently control emissions independently.

(d) The Meltshop EAF Baghouses (1 and 2) can serve as back up to the Meltshop LMF Baghouse.

(e) The Meltshop Continuous Casters (CC #1 and CC #2) can cast molten steel either from the Meltshop LMFs, Castrip Vacuum Degasser or Castrip LMS.

D.31.3 Meltshop EAF Baghouses PM and Opacity [40 CFR 60.272a]

(a) Pursuant to 40 CFR 60.272a(a)(1), the particulate matter (PM) emissions from the Meltshop EAFs and AOD vessel, exhausting through the Meltshop EAF Baghouses (1 and 2), shall not exceed 0.0052 gr/dscf. Compliance is determined by using methods specified in 40 CFR 60, Subpart AAa or other methods as approved by the Commissioner.

(b) Pursuant to 40 CFR 60.272a(a)(2), the visible emissions from the Meltshop EAFs and AOD vessel, exhausting through the Meltshop EAF Baghouses (1 and 2), shall not exceed 3% opacity, based on a 6-minute average.

The opacity standard applies to each baghouse.

(c) Pursuant to 40 CFR 60.272a(a)(3), the visible opacity from the Meltshop operations, due solely to the operations of the Meltshop EAFs and AOD that are not exhausting to the Meltshop EAF Baghouses (1 and 2) shall not exceed 6% opacity , based on a 6-minute average.

(d) Pursuant to 40 CFR 60.272a(b), the visible emissions from the EAF Dust Handling System shall not exceed 10% opacity, based on a 6-minute average.

D.31.4 Meltshop EAF PSD BACT for Metals [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements) and PSD/SSM 107-24348-00038, the Permittee shall comply with the following BACT requirements:

(a) The Lead emissions from the Meltshop EAF Baghouses (1 and 2) controlling the two (2) EAFs, AOD, desulfurization station, two (2) Continuous Casters and LMF EU-13 (c) shall be limited to 0.00048 pound per ton of steel produced and 0.24 pound per hour, based on a 3-hour block average.

(b) The Mercury emissions from the Meltshop EAF Baghouses (1 and 2) controlling the two (2) EAFs, AOD, desulfurization station, two (2) Continuous Casters and LMF EU-13 (c) shall be limited to 0.04 pound per hour, based on a 3-hour block average.

(c) The Beryllium emissions from the Meltshop EAF Baghouses (1 and 2) controlling the two (2) EAFs, AOD, desulfurization station, two (2) Continuous Casters and LMF EU-13 (c) shall be limited to 0.002 pound per hour, based on a 3-hour block average.

(d) The Fluorides emissions from the Meltshop EAF Baghouses (1 and 2) controlling the two (2) EAFs, AOD, desulfurization station, two (2) Continuous Casters and LMF EU-13 (c) shall be limited to 0.01 pound per ton of steel produced and 5.02 pounds per hour, based on a 3-hour block average.

The fluorides emissions from the EAFs shall be minimized by using granular Fluorspar, to minimize fluorides emissions and it shall be applied at a rate of 250 pounds/heat at each EAFs.

(e) The emissions from lead and mercury shall be minimized in accordance with the Scrap Management Program (SMP) and

(f) The emissions from the Meltshop EAFs/AODs, desulfurization station and two (2) Continuous Casters shall be controlled by a baghouse.

D.31.5 Meltshop EAF Dust and Alloy Handling/Treatment System PM and Opacity PSD BACT [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements), the Permittee shall comply with the following BACT requirements:

(a) Visible emissions from the EAF Dust Handling System and the Treatment System (DTF) shall each not exceed 10% opacity, based on a 6-minute average.

(b) The AOD vessel alloy handling system emissions shall be captured by the Meltshop Roof Canopy.

D.31.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan (PMP), in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these units and their control devices.

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.31.7 Meltshop EAF PSD BACT [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements), the Permittee shall comply with the following BACT requirements:

(a) Each EAF (EAF #1 and EAF #2) shall be equipped and operated with oxy fuel burners.

(b) Each EAF shall be controlled by a direct shell evacuation (DSE) system and canopy hoods.

(c) VOC emissions shall be controlled through an extensive scrap management program. The Permittee shall implement the scrap management plan (SMP) attached to this permit in Appendix B.

(1) All grades of scrap charged to the furnaces shall not contain observable non-ferrous metals or non-metallics.

(2) All grades of scrap shall be free of excessive dirt, oil, and grease.

(3) Heavily oiled scrap shall not be used.

(d) Good working practices shall be observed.

D.31.8 Meltshop EAF Dust Handling System and Dust Treatment System PSD BACT [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements), the Permittee shall comply with the following BACT requirements:

(a) The EAF Dust Handling System (DTF) shall be equipped with bin vents on the silos.

(b) The Dust Treatment System shall be equipped with a scrubber on the dust system and shall incorporate baghouse(s) for evacuation on the truck loading buildings**.**

(c) Options for the dust transfer are:

(1) from silo to truck through a loading spout,

(2) from silo to railcar through a loading spout,

(3) from silo to truck through a loading spout to transfer to the existing Meltshop EAF Baghouses. Unloading from the truck at the existing Meltshop EAF Baghouses also occurs in the building, transferring the dust through augers and a bucket elevator to the existing silo. In this option, the existing EAF dust treatment will have a maximum capacity of 100,000 lb/hr.

(4) treating dust at the new silo and transferring to a truck. No loading spout is necessary because the material is no longer dusty, as treated.

(d) Dust transfer shall occur inside the building.

D.31.9 Particulate Control Equipment Operation [326 IAC 2-2]

(a) Pursuant to 326 IAC 2-2, either or both the Meltshop EAF Baghouses (1 and 2) for particulate control shall be in operation and control emissions at all times that one or all of the EAFs, AOD vessel, Desulfurization station, and Meltshop Continuous Casters (EAF #1, EAF #2, AODs, DS, CC#1, and CC#2) are in operation.

(b) Pursuant to 326 IAC 2-2, the following particulate control shall be in operation and control emissions at all times when its corresponding process is in operation:

(1) bin vents for the silos,

(2) scrubber for dust treatment, and

(3) baghouse for truck loading building evacuation.

(c) Pursuant to 326 IAC 2-2, fugitive emissions generated during EAFs and AOD vessel operations (EAF #1, EAF #2, and AODs) shall be captured by the Meltshop roof canopies or contained and collected within the Meltshop EAF building.

D.31.10 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11][40 CFR 60.275a]

(a) Within sixty (60) days but no later than one hundred and eighty (180) days after the initial start up of the modified EAFs and AODs permitted in this PSD/SSM NO. 107-24348-00038, the Permittee shall conduct a performance test on the Meltshop EAF Baghouses (stack and vent), controlling the EAFs, AODs, Desulfurization Station, Continuous Caster and LMF EU-13 (c) for the following:

(1) Lead,

(2) Mercury,

(3) Fluorides

(4) Beryllium

The 2 Meltshop EAFs shall be operating simultaneously during the tests.

(b) Pursuant to 40 CFR 60.13(i)(1), for the Meltshop EAF Baghouse 2 stack, the Permittee shall determine either:

(1) the control system fan motor amperes and all damper positions;

(2) the volumetric flow rate through each separately ducted hood; or,

(3) the volumetric flow rate at the control device inlet and all damper positions.

During all compliance demonstration testing.

(c) Pursuant to 40 CFR 60.275a and to demonstrate compliance with Conditions D.31.1 and D.31.3, the Permitee shall conduct performance test within sixty (60) days but no later than one hundred and eighty (180) days after the initial start up of the modified EAFs and AODs permitted in this PSD/SSM NO. 107-24348-00038 for opacity on the following emission points utilizing 40 CFR Part 60, Appendix A, Method 9, or other methods as approved by the Commissioner:

(1) Meltshop EAF Baghouse1 roof monitor and Baghouse2 stack,

(2) Meltshop Roof monitor, and

(3) EAF Dust Handling System,

(d) The EAF dust shall be sampled and analyzed for Lead content on a monthly basis according to the procedures specified in the EPA publication SW-846-6010B, entitled Test Methods for Evaluating Solid Waste, Physical/Chemical Methods.

(e) The particulate testing shall utilized 40 CFR Part 60, Appendix A, Method 5, Method 201 or 201A, Method 202 or other methods as approved by the Commissioner.

(f) PM10 includes filterable and condensible PM10.

(g) The PM, PM10, VOC, Mercury, Fluorides, Beryllium and Lead tests shall be repeated at least once every 2.5 years from the date of a valid compliance demonstration.

(h) Any stack which has multiple processes which exhaust to the same stack shall operate all of the processes simultaneously in accordance with 326 IAC 3-6 (Source Sampling Procedures) and 40 CFR 60.275a(b).

(i) These tests shall be performed using methods as approved by the Commissioner.

(j) Testing shall be conducted in accordance with Section C - Performance Testing and 40 CFR Part 60.275a(a) to (j) (as applicable).

D.31.11 CO, SO_2, and NO_x Continuous Emission Rate Monitoring Requirement [326 IAC 2-2] [326 IAC 3-5]

(a) CO, SO2, and NOx CEMS:

(1) Pursuant to the consent decree in United States v. Nucor Corporation, No. 4-00-3945-24 (D.S.C.) and 326 IAC 2-2 (PSD), the Permittee shall install, calibrate, certify, operate, and maintain continuous emissions monitoring systems (CEMS) for measuring CO, SO2, and NOx emissions rates in pounds per hour from the Meltshop EAFs, in accordance with 326 IAC 3-5-2 and 326 IAC 3-5-3.

The Permittee shall comply with the PSD BACT SO2 and NOx hourly emission rates by averaging the CEMS readings based on the actual hours of operation in a 24-hour period.

(b) The Permittee shall prepare and submit to IDEM, OAQ a written report of the results of the calibration gas audits and relative accuracy test audits for each calendar quarter within thirty (30) calendar days after the end of each quarter. The report must contain the information required by 326 IAC 3-5-5(e)(2).

(c) The Permittee shall record the output of the systems in pounds per hour and shall perform the required record keeping and reporting, pursuant to 326 IAC 3-5-6 and 326 IAC 3-5-7.

D.31.12 Visible Emissions [40 CFR 60.273a]

(a) Pursuant to 40 CFR 60.273a, 326 IAC 2-2, the Permittee shall have a certified visible emissions reader/observer to conduct, perform and record visible observations of the:

(1) EAF Baghouse 1 roof monitor and EAF Baghouse 2 stack, and

(2) Meltshop Roof Monitor,

once per day, when either one or both the Meltshop EAFs are operating in the melting and refining period, in accordance with 40 CFR 60, Appendix A, Method 9.

(b) Pursuant to 40 CFR 60.13(i)(1) and the Approved Alternate Monitoring System requirements for the Meltshop EAF Baghouse 2 stack, the Permittee shall have a certified visible emissions reader/observer to conduct, perform and record visible observations of the stack for at least three (3) six (6)-minute periods during furnace meltdown and refining operations, including periods of simultaneous furnace operation at least, once per day, when either one or both the Meltshop EAFs are operating in the melting and refining period, in accordance with 40 CFR 60, Appendix A, Method 9.

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

D.31.13 Total Hydrocarbon Continuous Emission Rate Monitoring Requirement

(a) Pursuant to 326 IAC 2-2, 326 IAC 2-7-5(3), and 326 IAC 3-5-1(d), the Permittee shall install, calibrate, certify, operate, and maintain a continuous emissions monitoring system (CEMS) for measuring total hydrocarbons emissions rates in pounds per hour from the Meltshop EAFs, in accordance with 326 IAC 3-5-2 and 326 IAC 3-5-3.

(b) The Permittee shall record the output of the system in pounds per hour and shall perform the required record keeping and reporting, pursuant to 326 IAC 3-5-6, 326 IAC 3-5-7.

(c) When for any one reading of the pound per hour rate of the total hydrocarbons, based on a 3-hour block is higher than the total hydrocarbons concentration corresponding to the VOC emission rate specified in Condition D.31.1(f) using the data during the most recent valid compliance stack test, the Permittee shall take reasonable steps in accordance with Section C - Response to Excursions or Exceedances. A THC reading that is above the concentration is not a deviation from this permit.

Failure to take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

D.31.14 Maintenance of CEMS [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the SO2, NOx, CO or total hydrocarbon (THC) continuous emission monitoring systems (CEMS) occurs, the Permittee shall maintain records of all CEMS malfunctions, out of control periods, calibration and adjustment activities, and repair or maintenance activities.

(b) The continuous emissions monitoring system (CEMS) shall be operated at all times the emissions unit or process is operating except for reasonable periods of monitor system downtime due to necessary calibration or maintenance activities or malfunctions. Calibration and maintenance activities shall be conducted pursuant to the standard operating procedures under 326 IAC 3-5-4(a).

(c) Except as otherwise provided by a rule or provided specifically in this permit, whenever a continuous emission monitor system (CEMS) is malfunctioning or will be down for calibration, maintenance, or repairs for a period of four (4) hours or more, the Permittee shall perform supplemental monitoring by using calibrated handheld monitors to measure the SO2 , NOx , CO and THC emissions on a once per shift basis, unless the CEMS operation is restored prior to the end of the shift.

The handheld monitors shall be approved by the IDEM, OAQ.

(d) The Permittee shall keep records in accordance with 326 IAC 3-5-6(b) that includes the following:

(1) All documentation relating to:

(A) design, installation, and testing of all elements of the monitoring system; and

(B) required corrective action or compliance plan activities.

(2) All maintenance logs, calibration checks, and other required quality assurance activities.

(3) All records of corrective and preventive action.

(4) A log of plant operations, including the following:

(A) Date of facility downtime.

(B) Time of commencement and completion of each downtime.

(C) Reason for each downtime.

(e) The Permittee shall keep records that describe the supplemental monitoring implemented during the downtime to assure compliance with applicable emission limitations.

(f) In accordance with 326 IAC 3-5-7(5), the Permittee shall submit reports of continuous monitoring system instrument downtime, except for zero (0) and span checks, which shall be reported separately.

The reports shall include the following:

(1) Date of downtime.

(2) Time of commencement.

(3) Duration of each downtime.

(4) Reasons for each downtime.

(5) Nature of system repairs and adjustments.

(g) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5, 326 IAC 2-2, and 40 CFR Part 60.

D.31.15 Bag Leak Detection System (BLDS) [40 CFR 60.13(i)(1)]

(a) The Permittee shall install and operate a continuous bag leak detection system (BLDS) for each Meltshop EAF Baghouse (1 and 2). The BLDS for Meltshop EAF Baghouse1 (BLDS 1) shall be installed according to the provisions of Condition D.31.15(b) and operated according to the conditions in D.31.15(d). The BLDS for Meltshop EAF Baghouse2 (BLDS 2) shall be installed according to the provisions of Condition D.31.15 (c) and operated according to the conditions in D.31.15(d).

(b) The BLDS (BLDS 1) for Meltshop EAF Baghouse1 shall be installed according to the conditions in (i) through (vii) below.

(1) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentration of 0.018 grains per actual cubic foot or less.

(2) The bag leak detection system sensor must provide output of relative particulate matter loading.

(3) The bag leak detection system must be equipped with an alarm system that will alarm when an increase in relative particulate loading is detected over a preset alarm level.

(4) The bag leak detection system shall be installed in a manner consistent with available written guidance from the U.S. Environmental Protection Agency or, in the absence of such written guidance, the manufacturer's written specification and recommendations for installation, and adjustment of the system.

(5) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time.

(6) The bag detector must be installed downstream of the baghouse bags.

(7) The Permittee shall develop and submit to IDEM, OAQ, for approval, a site-specific monitoring plan that addresses the items identified in paragraph (A) through (E) below. For each bag leak detection system that operates based on the triboelectric effect, the monitoring plan shall be consistent with the recommendations contained in the U.S. Environmental Protection Agency guidance document "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R98-015). The Permittee shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe the following:

(A) Installation of the bag leak detection system;

(B) Initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established;

(C) Operation of the bag leak detection system including quality assurance procedures;

(D) How the bag leak detection system will be maintained including a routine maintenance schedule and spare parts inventory list; and

(E) How the bag leak detection system output shall be recorded and stored.

(c) The BLDS (BLDS 2) for Meltshop EAF Baghouse2 shall be installed according to the conditions in (i) through (iv) below.

(1) The bag leak detection system may be of the triboelectric, electrodynamic, light scattering or light transmittance type, and must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 0.0044 grains per actual cubic foot or less.

(2) The bag leak detection system sensor must provide output of relative particulate matter loadings, which shall be continuously recorded.

(3) The bag leak detection system must be equipped with an alarm which shall sound and alert the operator when an increase of particulate loading exceeds a set point established in accordance with the monitoring plan required in Condition D.1.15(iv) below.

(4) The Permittee shall develop a monitoring plan for BLDS 2, and shall submit the plan to U.S. EPA Region 5 for review and approval, unless U.S. EPA transfers this responsibility to IDEM, OAQ and written notice of such transfer is provided to Permittee. If BLDS 2 is of the triboelectric type, the plan shall be consistent with the recommendations contained in the U.S. EPA guidance document "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015). BLDS 2 shall be operated and maintained in accordance with the plan. The plan, at a minimum, must discuss the following:

(A) Installation details;

(B) Initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established;

(C) Day to day operation including quality assurance operations;

(D) Maintenance procedures, including spare parts inventories.

(d) Each bag leak detection system (BLDS 1 and 2) shall be continuously operated except during periods when its baghouse is shut down. The system shall continuously monitor relative particulate matter loadings to detect bag leaks and other conditions that result in increases in particulate loadings. Each BLDS shall meet the following requirements:

(1) Following initial adjustment, the Permittee shall not adjust the averaging period, alarm set point, or alarm delay time without approval from IDEM, OAQ except as provided for in paragraphs (A) and (B) below.

(A) 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.

(B) If opacities greater than zero percent are observed over four consecutive 15-second observations during daily opacity observations and the alarm on the bag leak detection system does not sound, the owner or operator shall lower the alarm set point on the bag leak detection system to a point where the alarm would have sounded during the period when the opacity observations were made.

(2) In the event of a bag leak detection system alarm:

(A) Within one hour of an alarm, the Permittee shall initiate procedures to determine the cause of the alarm.

(B) Except as provided under Condition D.1.15(d)(iii) below, the cause of the alarm must be alleviated within 3 hours of the time the alarm occurred by taking whatever corrective actions(s) are necessary. Corrective actions may include, but are not limited to the following:

(i) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in particulate 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; and

(vii) Determining that the alarm is a result of a malfunction in the BLDS equipment itself, in which case the compartment may be restored to operation and reasonable corrective action steps shall be taken to restore the BLDS to proper operation.

(3) IDEM, OAQ may allow Permittee more than 3 hours to alleviate specific conditions that cause an alarm if Permittee identifies the condition that led to an alarm, adequately explains why it was not feasible to alleviate the condition within 3 hours of the time the alarm occurred, and demonstrates that the requested additional time will ensure alleviation of the condition as expeditiously as practicable.

D.31.16 Monitoring of Operations [40 CFR 60.274a]

Pursuant to 40 CFR 60.274a, the Permittee shall comply with the following monitoring requirements:

(a) Pursuant to 40 CFR 60.274a(c), when the Permittee is required to demonstrate compliance with the opacity standard and at any other time IDEM, OAQ, or the US EPA may require, that either the control system fan motor amperes and all damper positions or the volumetric flow rate through each separately ducted hood shall be determined during all periods in which a hood is operated for the purpose of capturing emissions from the EAF.

(b) Pursuant to 40 CFR 60.274a(d), the Permittee shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers, and damper switches). This inspection shall 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). Any deficiencies shall be noted and proper maintenance performed.

D.31.17 Scrubber Parametric Monitoring [326 IAC 2-7-5(3)(A)(iii)] [326 IAC 2-7-5(d)]

The Permittee shall continuously monitor the flow rate of the scrubbing liquid and record the flow rate as a 3-hour average when the EAF dust treatment facility is in operation. For the purposes of this condition, continuously means no less often than once per minute. When for any one reading, the flow rate is below the minimum of 40 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A flow rate that is below the above mentioned minimum 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 from this permit.

The instruments used for determining the 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 annually.

D.31.18 Scrubber Detection [326 IAC 2-7-5] [326 IAC 2-7-6]

In the event that a scrubber malfunction 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). Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.31.19 Compliance Assurance Monitoring (CAM) [40 CFR Part 64]

Pursuant to 40 CFR Part 64, the Permittee shall comply with the following Compliance Assurance Monitoring requirements for the Meltshop baghouses controlling the EAFs, Argon Oxygen Decarburization vessels, desulfurization station and continuous casters:

(a) Monitoring Approach – For EAFs/AODs

EAFs/AODs				
PARAMETER	INDICATOR NO. 1	INDICATOR NO. 2	INDICATOR NO. 3	INDICATOR NO. 4
I. Indicator Measurement Approach	PM Concentration)	Opacity	Bag Leak Detection System (BLDS)	Bag Condition
	U.S. EPA Method 5, for PM or other Methods approved by the Commissioner – Baghouse1 and Baghouse2	Method 9 visual observations.	Continuous measurement of relative PM loading in the baghouse stack.	Visual inspection.
II. Indicator Range	PM emission limit of 0.0018 grain/dscf	An excursion is defined as an opacity measurement exceeding 3% on a 6-minute average.	Predetermined increases in PM loading sets off an alarm, which the operator will respond to.	An excursion is defined as failure to perform the monthly inspection.
III. Performance Criteria				
A. Data Representativeness	U.S. EPA Method 5, for PM or other Methods approved by the Commissioner	Procedures addressed in Method 9	Monthly operational status inspections of the equipment important to the total capture system.	Baghouse inspected visually for bag leaks.
B. Verification of Operational Status	Fans amps and damper position.	NA	NA	NA
C. QA/QC Practices and Criteria	U.S. EPA Method 5, for PM or other Methods approved by the Commissioner	Use of a certified visible emission observer.	Periodic maintenance of BLDS.	Trained personnel perform inspections and maintenance.
D. Monitoring Frequency	Once every 2.5 years.	Daily (when the EAF is operating unless inclement weather).	Continuous relative PM loading measurements.	Bi-Annual
IV. Data Collection Procedures	U.S. EPA Method 5, for PM or other Methods approved by the Commissioner	Daily visual observations of opacity are recorded on V.E. Form.	Record of alarm instances and maintenance activity.	Results of inspections and maintenance activities performed are recorded in baghouse maintenance log.
Averaging Period	Average of 3 test runs each 4 hours long	Six-minute average.	NA	NA

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.31.20 Record Keeping Requirements

(a) The Permittee shall maintain records required under 326 IAC 3-5-6 at the source in a manner that they may be inspected by the IDEM, OAQ, or the US EPA, if so requested or required.

(b) The Permittee shall maintain records of the amount of steel poured/tapped in each consecutive twelve (12) month period and make available upon request to IDEM, OAQ, and the US EPA.

(c) The Permittee shall maintain records of the readings of the SO_2, NO_x, CO and THC CEMS in pounds per hour.

(d) The Permittee shall maintain records of the visible emission readings required by Condition D.31.12(a).

(e) Pursuant to 40 CFR 60.274a and 40 CFR 60.276a(a), the Permittee shall maintain and make available upon request to IDEM, OAQ, and the US EPA records of the monthly operational status inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers, and damper switches); shop opacity observations conducted at least once per day; and either:

(1) once-per-shift fan motor amperes and damper position,

(2) continuous volumetric flow rate through each separately ducted hood; or

(3) continuous volumetric flow rate at the control device inlet and once-per-shift damper positions.

The monitoring device(s) may be installed in any appropriate location in the exhaust duct such that reproducible flow rate monitoring will result.

(f) The Permittee shall maintain records of the following for the EAF Dust Treatment scrubber and make available upon request to IDEM, OAQ, and the US EPA:

(1) The continuous flow rate records (on a 3-hour average basis) for the scrubber.

(2) Documentation of all reasonable response steps implemented for every flow rate reading that is outside of the range.

(g) The Permittee shall maintain records of the following for the BLDS and make available upon request to IDEM, OAQ, and the US EPA:

(1) Records of the system output.

(2) Records of system adjustments, including the date and time of each adjustment, and initial and final settings.

(3) Records of the date and time of each system alarm, including, but not limited to, the date and time that procedures to determine the cause of the alarm were initiated, if procedures to determine the cause of the alarm were initiated within one (1) hour, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and if the alarm was alleviated within 3 hours of the alarm.

(4) Records of the calculations of the percent of time the alarm sounded during each six (6) month period.

(5) Records of the dates and times that the BLDS was not operational, and the reason(s) why it was not operational.

(h) Pursuant to 40 CFR 60.276a(a), records of the measurements required in 40 CFR 60.274a, must be retained for at least 2 years following the date of the measurement.

(i) To document compliance with Condition D.31.19 the Permittee shall maintain records of baghouse inspections. These records shall include as a minimum, dates, initials of the person performing the inspections, results, and corrective actions taken in response to excursions as required by the CAM for the EAFs/AOD (if any are required).

(j) To document compliance with Condition D.31.4(d), the Permittee shall maintain records of the amount of Fluorspar applied at the EAFs.

(k) Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(l) All records shall be maintained in accordance with Section C - General Record.

D.31.21 Reporting Requirements [326 IAC 2-1.1-11] [40 CFR 60.276a]

(a) The Permittee shall submit a quarterly report of excess emissions, using the Quarterly Deviation and Compliance Monitoring Report or equivalent, of the following:

(1) SO_2, NO_x, CO, and total hydrocarbons readings from the CEMS,

(2) Opacity readings from the EAF Baghouse 1 roof monitor, EAF Baghouse 2 stack and Meltshop roof monitor; and

This reporting requirement also satisfies the semiannual exceedance reporting required under 40 CFR 60.276a(b) and (g).

(b) These reports shall be submitted no later than thirty (30) calendar days following the end of each calendar quarter and in accordance with Section C - General Reporting Requirements of this permit.

(c) The Permittee shall submit a semi-annual report for each BLDS, the following information:

(1) The percent of time the alarm sounded during each six (6) month reporting period;

(2) All visible emission data where six minute averages exceeded 3 percent opacity;

(3) The dates and times when the alarm sounded and procedures to initiate corrective action were not initiated within one (1) hour, and the date and time when corrective actions were initiated;

(4) The dates and times when the alarm sounded and the cause of the alarm was not alleviated within three (3) hours, and the dates and times when the cause of the alarms was alleviated, and;

(5) The dates and times that the BLDS was not operational, and the reason(s) why it was not operational.

(d) Pursuant to 40 CFR 60.276a, the Permittee shall furnish to IDEM, OAQ, and the US EPA a written report of the results of the compliance emission tests. This report shall include, at a minimum, the following information:

(1) Facility name and address;

(2) Plant representative;

(3) Make and model of process, control device, and continuous monitoring equipment;

(4) Flow diagram of process and emissions capture equipment including other equipment or process(es) ducted to the same control device;

(5) Rated (design) capacity of process equipment;

(6) The following operating conditions:

(A) List of charge and tap weights and materials;
(B) Heat times and process log;
(C) Control device operation log; and
(D) Continuous monitor or Reference Method 9 data.

(7) Test dates and test times;

(8) Test company;

(9) Test company representative;

(10) Test observers from outside agency;

(11) Description of test methodology used, including any deviation from standard reference methods;

(12) Schematic of sampling location;

(13) Number of sampling points;

(14) Description of sampling equipment;

(15) Listing of sampling equipment calibrations and procedures;

(16) Field and Laboratory data sheets;

(17) Description of sample recovery procedures;

(18) Sampling equipment leak check results;

(19) Description of quality assurance procedures;

(20) Description of analytical procedures;

(21) Notation of sample blank corrections; and

(22) Sample emission calculations.

D.31.22 General Provisions Relating to NSPS [326 IAC 12-1-1] [40 CFR Part 60, Subpart A]

Pursuant to 40 CFR 60.460, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1-1, for the two (2) Meltshop Electric Arc Furnaces (EAFs), identified as EAF #1 and EAF #2, the Argon oxygen decarburization (AOD) vessels, identified as AODs, and the EAF dust treatment facility, identified as DTF, as specified in Appendix A of 40 CFR Part 60, Subpart AAa in accordance with schedule in 40 CFR Part 60, Subpart AAa.

D.31.23 New Source Performance Standards for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels [40 CFR Part 60, Subpart AAa]

Pursuant to 40 CFR Part 60, Subpart AAa, the two (2) Meltshop Electric Arc Furnaces (EAFs), identified as EAF #1 and EAF #2, the Argon oxygen decarburization (AOD) vessels, identified as AODs, and the EAF dust treatment facility, identified as DTF, shall comply with the following provisions:

D.31.24 One Time Deadlines Relating to Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983

The Permittee must conduct the initial performance tests within 60 days after achieving maximum production rate, but no later than 180 days after start-up.

Subpart AAa—Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983

§ 60.270a Applicability and designation of affected facility.

(a) The provisions of this subpart are applicable to the following affected facilities in steel plants that produce carbon, alloy, or specialty steels: electric arc furnaces, argon-oxygen decarburization vessels, and dust-handling systems.

(b) The provisions of this subpart apply to each affected facility identified in paragraph (a) of this section that commences construction, modification, or reconstruction after August 17, 1983.

§ 60.271a Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

Argon-oxygen decarburization vessel (AOD vessel) means any closed-bottom, refractory-lined converter vessel with submerged tuyeres through which gaseous mixtures containing argon and oxygen or nitrogen may be blown into molten steel for further refining.

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 conditions that result in increases in particulate loadings. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, electrodynamic, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

Capture system means the equipment (including ducts, hoods, fans, dampers, etc.) used to capture or transport particulate matter generated by an electric arc furnace or AOD vessel to the air pollution control device.

Charge means the addition of iron and steel scrap or other materials into the top of an electric arc furnace or the addition of molten steel or other materials into the top of an AOD vessel.

Control device means the air pollution control equipment used to remove particulate matter from the effluent gas stream generated by an electric arc furnace or AOD vessel.

Direct-shell evacuation control system (DEC system) means a system that maintains a negative pressure within the electric arc furnace above the slag or metal and ducts emissions to the control device.

Dust-handling system means equipment used to handle particulate matter collected by the control device for an electric arc furnace or AOD vessel subject to this subpart. For the purposes of this subpart, the dust-handling system shall consist of the control device dust hoppers, the dust-conveying equipment, any central dust storage equipment, the dust-treating equipment (e.g., pug mill, pelletizer), dust transfer equipment (from storage to truck), and any secondary control devices used with the dust transfer equipment.

Electric arc furnace (EAF) means a furnace that produces molten steel and heats the charge materials with electric arcs from carbon electrodes. For the purposes of this subpart, an EAF shall consist of the furnace shell and roof and the transformer. Furnaces that continuously feed direct-reduced iron ore pellets as the primary source of iron are not affected facilities within the scope of this definition.

Heat cycle means the period beginning when scrap is charged to an empty EAF and ending when the EAF tap is completed or beginning when molten steel is charged to an empty AOD vessel and ending when the AOD vessel tap is completed.

Meltdown and refining period means the time period commencing at the termination of the initial charging period and ending at the initiation of the tapping period, excluding any intermediate charging periods and times when power to the EAF is off.

Melting means that phase of steel production cycle during which the iron and steel scrap is heated to the molten state.

Negative-pressure fabric filter means a fabric filter with the fans on the downstream side of the filter bags.

Positive-pressure fabric filter means a fabric filter with the fans on the upstream side of the filter bags.

Refining means that phase of the steel production cycle during which undesirable elements are removed from the molten steel and alloys are added to reach the final metal chemistry.

Shop means the building which houses one or more EAF's or AOD vessels.

Shop opacity means the arithmetic average of 24 observations of the opacity of emissions from the shop taken in accordance with Method 9 of appendix A of this part.

Tap means the pouring of molten steel from an EAF or AOD vessel.

Tapping period means the time period commencing at the moment an EAF begins to pour molten steel and ending either three minutes after steel ceases to flow from an EAF, or six minutes after steel begins to flow, whichever is longer.

§ 60.272a Standard for particulate matter.

(a) On and after the date of which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from an EAF or an AOD vessel any gases which:

(1) Exit from a control device and contain particulate matter in excess of 12 mg/dscm (0.0052 gr/dscf);

(2) Exit from a control device and exhibit 3 percent opacity or greater; and

(3) Exit from a shop and, due solely to the operations of any affected EAF(s) or AOD vessel(s), exhibit 6 percent opacity or greater.

(b) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from the dust-handling system any gases that exhibit 10 percent opacity or greater.

§ 60.273a Emission monitoring.

(a) Except as provided under paragraphs (b) and (c) of this section, a continuous monitoring system for the measurement of the opacity of emissions discharged into the atmosphere from the control device(s) shall be installed, calibrated, maintained, and operated by the owner or operator subject to the provisions of this subpart.

(b) No continuous monitoring system shall be required on any control device serving the dust-handling system.

(d) A furnace static pressure monitoring device is not required on any EAF equipped with a DEC system if observations of shop opacity are performed by a certified visible emission observer as follows: Shop opacity observations shall be conducted at least once per day when the furnace is operating in the meltdown and refining period. Shop opacity shall be determined as the arithmetic average of 24 consecutive 15-second opacity observations of emissions from the shop taken in accordance with Method 9. Shop opacity shall be recorded for any point(s) where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of visible emissions, only one observation of shop opacity will be required. In this case, the shop opacity observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident.

(e) A bag leak detection system must be installed and continuously operated on all single-stack fabric filters if the owner or operator elects not to install and operate a continuous opacity monitoring system as provided for under paragraph (c) of this section. In addition, the owner or operator shall meet the visible emissions observation requirements in paragraph (c) of this section. The bag leak detection system must meet the specifications and requirements of paragraphs (e)(1) through (8) of this section.

(1) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 1 milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less.

(2) The bag leak detection system sensor must provide output of relative particulate matter loadings and 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.)

(3) The bag leak detection system must be equipped with an alarm system that will sound when an increase in relative particulate loading is detected over the alarm set point established according to paragraph (e)(4) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(4) For each bag leak detection system required by paragraph (e) of this section, the owner or operator shall develop and submit to the Administrator or delegated authority, for approval, a site-specific monitoring plan that addresses the items identified in paragraphs (i) through (v) of this paragraph (e)(4). For each bag leak detection system that operates based on the triboelectric effect, the monitoring plan shall be consistent with the recommendations contained in the U.S. Environmental Protection Agency guidance document “Fabric Filter Bag Leak Detection Guidance” (EPA–454/R–98–015). The owner or operator shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe the following:

(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; and

(v) How the bag leak detection system output shall be recorded and stored.

(5) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time (if applicable).

(6) Following initial adjustment, the owner or operator shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided for in paragraphs (e)(6)(i) and (ii) of this section.

(i) 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 under paragraphs (e)(4) of this section.

(ii) If opacities greater than zero percent are observed over four consecutive 15-second observations during the daily opacity observations required under paragraph (c) of this section and the alarm on the bag leak detection system does not sound, the owner or operator shall lower the alarm set point on the bag leak detection system to a point where the alarm would have sounded during the period when the opacity observations were made.

(7) For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detection sensor must be installed downstream of the baghouse and upstream of any wet scrubber.

(8) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(f) For each bag leak detection system installed according to paragraph (e) of this section, the owner or operator shall initiate procedures to determine the cause of all alarms within 1 hour of an alarm. Except as provided for under paragraph (g) of this section, the cause of the alarm must be alleviated within 3 hours of the time the alarm occurred by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to, the following:

(1) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in particulate emissions;

(2) Sealing off defective bags or filter media;

(3) Replacing defective bags or filter media or otherwise repairing the control device;

(4) Sealing off a defective baghouse compartment;

(5) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; and

(6) Shutting down the process producing the particulate emissions.

(g) In approving the site-specific monitoring plan required in paragraph (e)(4) of this section, the Administrator or delegated authority may allow owners or operators more than 3 hours to alleviate specific conditions that cause an alarm if the owner or operator identifies the condition that could lead to an alarm in the monitoring plan, adequately explains why it is not feasible to alleviate the condition within 3 hours of the time the alarm occurred, and demonstrates that the requested additional time will ensure alleviation of the condition as expeditiously as practicable.

§ 60.274a Monitoring of operations.

(a) The owner or operator subject to the provisions of this subpart shall maintain records of the following information:

(1) All data obtained under paragraph (b) of this section; and

(2) All monthly operational status inspections performed under paragraph (c) of this section.

(b) Except as provided under paragraph (e) of this section, the owner or operator subject to the provisions of this subpart shall check and record on a once-per-shift basis the furnace static pressure (if DEC system is in use, and a furnace static pressure gauge is installed according to paragraph (f) of this section) and either: check and record the control system fan motor amperes and damper position on a once-per-shift basis; install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate through each separately ducted hood; or install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate at the control device inlet and check and record damper positions on a once-per-shift basis. The monitoring device(s) may be installed in any appropriate location in the exhaust duct such that reproducible flow rate monitoring will result. The flow rate monitoring device(s) shall have an accuracy of ±10 percent over its normal operating range and shall be calibrated according to the manufacturer's instructions. The Administrator may require the owner or operator to demonstrate the accuracy of the monitoring device(s) relative to Methods 1 and 2 of appendix A of this part.

(c) When the owner or operator of an affected facility is required to demonstrate compliance with the standards under §60.272a(a)(3) and at any other time that the Administrator may require (under section 114 of the CAA, as amended) either: the control system fan motor amperes and all damper positions, the volumetric flow rate through each separately ducted hood, or the volumetric flow rate at the control device inlet and all damper positions shall be determined during all periods in which a hood is operated for the purpose of capturing emissions from the affected facility subject to paragraph (b) of this section. The owner or operator may petition the Administrator for reestablishment of these parameters whenever the owner or operator can demonstrate to the Administrator's satisfaction that the affected facility operating conditions upon which the parameters were previously established are no longer applicable. The values of these parameters as determined during the most recent demonstration of compliance shall be maintained at the

appropriate level for each applicable period. Operation at other than baseline values may be subject to the requirements of §60.276a(c).

(d) Except as provided under paragraph (e) of this section, the owner or operator shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture system (*i.e.*, pressure sensors, dampers, and damper switches). This inspection shall 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). Any deficiencies shall be noted and proper maintenance performed.

(e) The owner or operator may petition the Administrator to approve any alternative to either the monitoring requirements specified in paragraph (b) of this section or the monthly operational status inspections specified in paragraph (d) of this section if the alternative will provide a continuous record of operation of each emission capture system.

(f) Except as provided for under §60.273a(d), if emissions during any phase of the heat time are controlled by the use of a DEC system, the owner or operator shall install, calibrate, and maintain a monitoring device that allows the pressure in the free space inside the EAF to be monitored. The pressure shall be recorded as 15-minute integrated averages. The monitoring device may be installed in any appropriate location in the EAF or DEC duct prior to the introduction of ambient air such that reproducible results will be obtained. The pressure monitoring device shall have an accuracy of ±5 mm of water gauge over its normal operating range and shall be calibrated according to the manufacturer's instructions.

(g) Except as provided for under §60.273a(d), when the owner or operator of an EAF controlled by a DEC is required to demonstrate compliance with the standard under §60.272a(a)(3), and at any other time the Administrator may require (under section 114 of the Clean Air Act, as amended), the pressure in the free space inside the furnace shall be determined during the meltdown and refining period(s) using the monitoring device required under paragraph (f) of this section. The owner or operator may petition the Administrator for reestablishment of the pressure whenever the owner or operator can demonstrate to the Administrator's satisfaction that the EAF operating conditions upon which the pressures were previously established are no longer applicable. The pressure determined during the most recent demonstration of compliance shall be maintained at all times when the EAF is operating in a meltdown and refining period. Operation at higher pressures may be considered by the Administrator to be unacceptable operation and maintenance of the affected facility.

(h) During any performance test required under §60.8, and for any report thereof required by §60.276a(f) of this subpart, or to determine compliance with §60.272a(a)(3) of this subpart, the owner or operator shall monitor the following information for all heats covered by the test:

(1) Charge weights and materials, and tap weights and materials;

(2) Heat times, including start and stop times, and a log of process operation, including periods of no operation during testing and the pressure inside an EAF when direct-shell evacuation control systems are used;

(3) Control device operation log; and

(4) Continuous opacity monitor or Method 9 data.

§ 60.275a Test methods and procedures.

(a) During performance tests required in §60.8, the owner or operator shall not add gaseous diluents to the effluent gas stream after the fabric in any pressurized fabric filter collector, unless the amount of dilution is separately determined and considered in the determination of emissions.

(b) When emissions from any EAF(s) or AOD vessel(s) are combined with emissions from facilities not subject to the provisions of this subpart but controlled by a common capture system and control device, the owner or operator shall use either or both of the following procedures during a performance test (see also §60.276a(e)):

(1) Determine compliance using the combined emissions.

(2) Use a method that is acceptable to the Administrator and that compensates for the emissions from the facilities not subject to the provisions of this subpart.

(c) When emission from any EAF(s) or AOD vessel(s) are combined with emissions from facilities not subject to the provisions of this subpart, the owner or operator shall demonstrate compliance with §60.272(a)(3) based on emissions from only the affected facility(ies).

(d) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).

(e) The owner or operator shall determine compliance with the particulate matter standards in §60.272a as follows:

(1) Method 5 shall be used for negative-pressure fabric filters and other types of control devices and Method 5D shall be used for positive-pressure fabric filters to determine the particulate matter concentration and volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 4 hours and 4.50 dscm (160 dscf) and, when a single EAF or AOD vessel is sampled, the sampling time shall include an integral number of heats.

(2) When more than one control device serves the EAF(s) being tested, the concentration of particulate matter shall be determined using the following equation:

$$c_{st} = \left[\sum_{i=1}^{n} \left(c_{si} \, Q_{sdi} \right) \right] \sum_{i=1}^{n} Q_{sdi}$$

where:

c_{st}=average concentration of particulate matter, mg/dscm (gr/dscf).

c_{si}=concentration of particulate matter from control device “i”, mg/dscm (gr/dscf).

n=total number of control devices tested.

Q_{sdi}=volumetric flow rate of stack gas from control device “i”, dscm/hr (dscf/hr).

(3) Method 9 and the procedures of §60.11 shall be used to determine opacity.

(4) To demonstrate compliance with §60.272a(a) (1), (2), and (3), the Method 9 test runs shall be conducted concurrently with the particulate matter test runs, unless inclement weather interferes.

(f) To comply with §60.274a (c), (f), (g), and (h), the owner or operator shall obtain the information required in these paragraphs during the particulate matter runs.

(g) Any control device subject to the provisions of the subpart shall be designed and constructed to allow measurement of emissions using applicable test methods and procedures.

(h) Where emissions from any EAF(s) or AOD vessel(s) are combined with emissions from facilities not subject to the provisions of this subpart but controlled by a common capture system and control device, the owner or operator may use any of the following procedures during a performance test:

(1) Base compliance on control of the combined emissions;

(2) Utilize a method acceptable to the Administrator that compensates for the emissions from the facilities not subject to the provisions of this subpart, or;

(3) Any combination of the criteria of paragraphs (h)(1) and (h)(2) of this section.

(i) Where emissions from any EAF(s) or AOD vessel(s) are combined with emissions from facilities not subject to the provisions of this subpart, determinations of compliance with §60.272a(a)(3) will only be based upon emissions originating from the affected facility(ies).

(j) Unless the presence of inclement weather makes concurrent testing infeasible, the owner or operator shall conduct concurrently the performance tests required under §60.8 to demonstrate compliance with §60.272a(a) (1), (2), and (3) of this subpart.

§ 60.276a Recordkeeping and reporting requirements.

(a) Records of the measurements required in §60.274a must be retained for at least 2 years following the date of the measurement.

(b) Each owner or operator shall submit a written report of exceedances of the control device opacity to the Administrator semi-annually. For the purposes of these reports, exceedances are defined as all 6-minute periods during which the average opacity is 3 percent or greater.

(c) Operation at a furnace static pressure that exceeds the value established under §60.274a(g) and either operation of control system fan motor amperes at values exceeding ±15 percent of the value established under §60.274a(c) or operation at flow rates lower than those established under §60.274a(c) may be considered by the Administrator to be unacceptable operation and maintenance of the affected facility. Operation at such values shall be reported to the Administrator semiannually.

(d) The requirements of this section remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with this section, provided that they comply with the requirements established by the State.

(e) When the owner or operator of an EAF or AOD is required to demonstrate compliance with the standard under §60.275 (b)(2) or a combination of (b)(1) and (b)(2) the owner or operator shall obtain approval from the Administrator of the procedure(s) that will be used to determine compliance. Notification of the procedure(s) to be used must be postmarked at least 30 days prior to the performance test.

(f) For the purpose of this subpart, the owner or operator shall conduct the demonstration of compliance with §60.272a(a) of this subpart and furnish the Administrator a written report of the results of the test. This report shall include the following information:

(1) Facility name and address;

(2) Plant representative;

(3) Make and model of process, control device, and continuous monitoring equipment;

(4) Flow diagram of process and emission capture equipment including other equipment or process(es) ducted to the same control device;

(5) Rated (design) capacity of process equipment;

(6) Those data required under §60.274a(h) of this subpart;

(i) List of charge and tap weights and materials;

(ii) Heat times and process log;

(iii) Control device operation log; and

(iv) Continuous opacity monitor or Method 9 data.

(7) Test dates and test times;

(8) Test company;

(9) Test company representative;

(10) Test observers from outside agency;

(11) Description of test methodology used, including any deviation from standard reference methods;

(12) Schematic of sampling location;

(13) Number of sampling points;

(14) Description of sampling equipment;

(15) Listing of sampling equipment calibrations and procedures;

(16) Field and laboratory data sheets;

(17) Description of sample recovery procedures;

(18) Sampling equipment leak check results;

(19) Description of quality assurance procedures;

(20) Description of analytical procedures;

(21) Notation of sample blank corrections; and

(22) Sample emission calculations.

(g) The owner or operator shall maintain records of all shop opacity observations made in accordance with §60.273a(d). All shop opacity observations in excess of the emission limit specified in §60.272a(a)(3) of this subpart shall indicate a period of excess emission, and shall be reported to the administrator semi-annually, according to §60.7(c).

(h) The owner or operator shall maintain the following records for each bag leak detection system required under §60.273a(e):

(1) Records of the bag leak detection system output;

(2) 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 system settings; and

(3) An identification of the date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, if procedures were initiated within 1 hour of the alarm, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and if the alarm was alleviated within 3 hours of the alarm.

D.31.24 One Time Deadlines Relating to Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983

The Permittee must conduct the initial performance tests within 60 days after achieving maximum production rate, but no later than 180 days after start-up.

SECTION D.32 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

MELTSHOP – LADLE METALLURGY FURNACES, PREHEATERS, AND DRYERS

(ss) Three (3) Meltshop Ladle Metallurgy Furnaces (LMFs)/Stirring Station, two (2) identified as EU-13 (a) and (b), constructed in 1988, and one (1) LMF identified as EU-13(c) approved for construction in 2007 with a maximum capacity of 502 tons/hour each and EU-13 (a) and (b) are controlled by a baghouse, identified as Meltshop LMF Baghouse, exhausting to stack S-13. The Meltshop LMF Baghouse has a design flow rate of 200,000 acf/min. The LMF baghouse was constructed in 1992. The LMF, EU-13(c) will be controlled by the EAFs baghouses which vent to stacks BH1 and BH2. In addition the LMFs have the following associated equipment:

(1a) Ladle Preheaters, identified as LP #1 - #5, uncontrolled and exhausting to stacks 7 and 8, consisting of:

(A) 3 units, identified as LP #1 - #3, constructed in 1989, each rated at 10 MMBtu per hour.

(B) 1 unit, identified as LP #4, constructed in 1994, rated at 7.5 MMBtu per hour.

(C) 1 unit, identified as LP #5, constructed in 1989, rated at 15 MMBtu per hour.

(1b) Ladle Preheaters, identified as LP #1a through LP #7a, consisting of:

(A) Three (3) natural gas-fired ladle preheaters, identified as LP #1a, LP #2a, and LP #3a, approved for construction in 2007, each with a heat input capacity of 10 MMBtu per hour, using propane as a backup fuel, with uncontrolled emissions exhausting to stacks 7 and 8.

(B) One (1) natural gas-fired AOD ladle preheater, identified as LP #4a, approved for construction in 2007, with a heat input capacity of 10 MMBtu per hour, using propane as a backup fuel, with uncontrolled emissions exhausting to stacks 7 and 8.

(C) One (1) natural gas-fired ladle preheater, identified as LP #5a, approved for construction in 2007, with a heat input capacity of 10 MMBtu per hour, using propane as a backup fuel, with uncontrolled emissions exhausting to stacks 7 and 8.

(D) One (1) natural gas-fired ladle preheater, identified as LP #6, approved for construction in 2006, with a heat input capacity of 12 MMBtu/hour, utilizing low-NOx burners, using propane as a backup fuel, with uncontrolled emissions exhausting to stacks 7 and 8.

(E) One (1) natural gas-fired ladle preheater/dryer, identified as LP #7a, approved for construction in 2007, with a heat input capacity of 10 MMBtu/hour, using propane as a backup fuel, with uncontrolled emissions exhausting to stacks 7 and 8.

(2a) Ladle Dryer, identified as LDS #1, constructed in 1989, consisting of a low NO_x natural gas fired burner, with a heat input capacity of 5 MMBtu per hour. Emissions are uncontrolled and exhausting to stack 12.

(2b) One (1) natural gas-fired Ladle Dryer, identified as LDS #1a, approved for construction in 2007, with a heat input capacity of 5 MMBtu per hour, using propane as a backup fuel, with uncontrolled emissions exhausting to stack S-12.

(3) Four (4) Tundish Preheaters, identified as TPH #1 - #4, constructed in 1995, consisting of 4 low NOx natural gas fired heaters, each with a heat input capacity of 6 MMBtu per hour, using propane as a backup fuel, with uncontrolled emissions exhausting to stack S-10. Five (5) Tundish Preheaters, identified as TP1 - TP5, constructed in 1995, each with a heat input capacity of 6 MMBtu per hour, using propane as a backup fuel.

(4) Two (2) Tundish Dryout Stations, identified as TD #1 and TD #2. TD #1 was constructed in 1989, and TD#2 was constructed in 1990, each with a heat input capacity of 9 MMBtu per hour, using propane as a backup fuel, with uncontrolled emissions exhausting to stack S-10.

(5) Four (4) Tundish Nozzle Preheaters, identified as TNP #1- #4, constructed in 1995, consisting of a low NOx natural gas fired Preheaters, each with a heat input capacity of 0.8 MMBtu per hour, using propane as a backup fuel, with uncontrolled emissions exhausting to stack S-10.

(6) One (1) natural gas-fired tundish dryout station, identified as TD #3, approved for construction in 2007, with a maximum heat input capacity of 2.4 MMBtu per hour, using propane as a backup fuel, with uncontrolled emissions exhausting to stack S-10.

(7) Two (2) natural gas-fired mandrel dryers, identified as MD #1 and MD #2, approved for construction in 2007, each with a heat input capacity of 1.5 MMBtu per hour, using propane as a backup fuel, with uncontrolled emissions exhausting to stack S-10.

(8) Fifteen (15) belt conveyors and 20 weight hoppers, with a maximum throughput of 200 tons per hour, approved for construction in 2007. These conveyors will supply lime, carbon and alloys to the new LMF.

(9) Flux and alloy material handling system for direct feeding of alloys, lime, carbon, scrap substitutes and other related materials to the LMFs, constructed in 1988 and approved for modification in 2007 with the addition of a three-sided building for bulk loading of material to the 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.32.1 Meltshop LMFs PSD BACT [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements) and PSD/SSM 107-24348-00038, the Permittee shall comply with the following BACT requirements:

(a) The Meltshop LMFs EU-13 (a), (b), shall be equipped with side draft hoods that evacuate to a baghouse (identified as Meltshop LMF Baghouse) capturing the particulate matter (PM). The Meltshop LMFs EU-13 (c) shall be controlled by the EAFs Baghouse1 and Baghouse2.

(b) The filterable PM emissions from the Meltshop LMF Baghouse controlling the two (2) LMFs, identified as EU-13 (a) and (b) shall not exceed 0.0018 gr/dscf.

(c) The filterable and condensible PM_{10} emissions from the Meltshop LMF Baghouse controlling the two (2) LMFs, identified as EU-13 (a) and (b) shall not exceed 0.0052 gr/dscf.

(d) The visible emissions from the Meltshop LMF Baghouse controlling the two (2) LMFs, identified as EU-13(a) and (b) shall not exceed 3% opacity, based on a 6-minute average.

(e) The NO_x emissions from the Meltshop LMF Baghouse controlling the two (2) LMFs, identified as EU-13 (a) and (b) shall not exceed 0.0176 lb/ton of steel produced and 8.8

pounds of NO_x per hour, based on a 3-hour block average.

(f) The SO_2 emissions from the Meltshop LMF Baghouse controlling the two (2) LMFs, identified as EU-13 (a) and (b) shall not exceed 210.84 pounds of SO_2 per hour averaged over a 24-hour block period.

(g) The CO emissions from the Meltshop LMF Baghouse controlling the two (2) LMFs, identified as EU-13 (a) and (b), shall not exceed 0.07125 lb/ton of steel produced and 35.77 pounds of CO per hour, based on a 3-hour block average.

(h) The VOC emissions from the Meltshop LMF Baghouse controlling the two (2) LMFs, identified as EU-13 (a) and (b), shall not exceed 0.0086 lb/ton of steel produced and 4.32 pounds of VOC per hour, based on a 3-hour block average.

D.32.2 Ladle Dryers PSD BACT [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements) and PSD/SSM 107-24348-00038, the Ladle Dryers (LDS #1 and LDS #1a) shall comply with the following BACT requirements:

(a) The Ladle Dryers (LDS #1 and LDS#1a) shall only burn natural gas, except as specified below, and shall be limited to 5.0 million Btu per hour heat input, each.

(b) PM/PM10 shall be limited to 7.6 pounds per million cubic feet of natural gas burned, 0.076 pounds per hour (total), and 0.33 tons per year (total).

(c) NOx emissions shall be limited to 100 pounds per million cubic feet of natural gas burned, 0 1.0 pounds per hour (total), and 4.38 tons per year (total).

(d) CO emissions shall be limited to 84 pounds per million cubic feet of natural gas burned, 0.84 pounds per hour (total), and 3.6 tons per year (total).

(e) VOC emissions from shall be limited to 5.5 pounds per million cubic feet of natural gas burned, 0.06 pounds per hour (total), and 0.24 tons per year (total).

(f) SO2 emission shall be limited to 0.6 lb per million cubic feet of natural gas burned, 0.006 pound per hour (total) and 0.026 ton per year (total).

(g) Visible emissions shall not exceed 5% opacity, based on a 6-minute average.

(h) The Ladle Dryer (LDS #1 and LDS #1a) shall only burn propane as a back-up fuel.

D.32.3 Ladle Preheaters PSD BACT [326 IAC 2-2]

(a) Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements) and PSD/SSM 107-24348-00038, the eleven Ladle Preheaters (LP #1- #5, LP#1a - #5a and #7a) shall comply with the following BACT requirements:

(1) The eleven Ladle Preheaters (LP #1- #5, LP#1a - #5a and #7a) shall only burn natural gas, except as specified below. The eleven preheaters (LP#1 - #5 LP#1a - #5a and #7a) shall each be limited to 10.0 million Btu per hour heat input

(2) PM/PM10 emissions from each of the eleven Ladle Preheaters (LP #1- #5, LP#1a - #5a and #7a) shall be limited to 7.6 pounds per million cubic feet of natural gas burned, 0.836 pounds per hour (total), and 3.7 tons per year (total).

(3) NOx emissions from each of the eleven Ladle Preheaters (LP #1- #5, LP#1a - #5a and #7a) shall be limited to 100 pounds per million cubic feet of natural gas burned, 11 pounds per hour (total), and 48.2 tons per year (total).

(4) CO emissions from each of the eleven Ladle Preheaters (LP #1- #5, LP#1a - #5a

and #7a) shall be limited to 84 pounds per million cubic feet of natural gas burned, 9.24 pounds per hour (total), and 40.5 tons per year (total).

(5) VOC emissions from each of the eleven Ladle Preheaters (LP #1- #5, LP#1a - #5a and #7a) shall be limited to 5.5 pounds per million cubic feet of natural gas burned, 0.605 pounds per hour (total), and 2.6 tons per year (total).

(6) SO2 emissions from each of the eleven Ladle Preheaters (LP #1-#5, LP#1a - #5a and #7a) shall be limited to 0.6 lb per million cubic feet of natural gas burned, 0.07 pounds per hour.

(7) The eleven Ladle Preheaters (LP #1- #5, LP#1a - #5a and #7a) shall only burn propane as a back-up fuel.

(8) Visible emissions from the eleven Ladle Preheaters (LP #1- #5, LP#1a - #5a and #7a) shall not exceed 5% opacity, based on a 6-minute average.

(b) Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements) and PSD SSM 107-21359-00038, issued on April 27, 2006, ladle preheater LP #6 shall comply with the following BACT requirements:

(1) The BACT for NOx shall be “good combustion practices”, utilize “pipeline quality” natural gas as the primary fuel and may utilize propane as a backup fuel, proper operation and shall not exceed a NOx emission rate of 0.05 pounds per MMBtu and 0.60 lbs per hour.

(2) The BACT for SO_2 shall be “good combustion practices”, utilize “pipeline quality” natural gas as the primary fuel and may utilize propane as a backup fuel, proper operation and shall not exceed a SO_2 emission rate of 0.0006 pounds per MMBtu and 0.007 lbs per hour.

(3) The BACT for CO shall be “good combustion practices”, utilize “pipeline quality” natural gas as the primary fuel and may utilize propane as a backup fuel, proper operation and shall not exceed a CO emission rate of 0.084 pounds per MMBtu and 1.01 lbs per hour.

(4) The BACT for PM/PM10 (filterable plus condensable) shall be “good combustion practices”, utilize “pipeline quality” natural gas as the primary fuel and may utilize propane as a backup fuel, proper operation and shall not exceed a PM/PM10 (filterable plus condensable) emission rate of 0.0076 pounds per MMBtu and 0.091 lbs per hour.

(5) The BACT for VOC shall be “good combustion practices”, utilize “pipeline quality” natural gas as the primary fuel and may utilize propane as a backup fuel, proper operation and shall not exceed a VOC emission rate of 0.0054 pounds per MMBtu and 0.065 lbs per hour.

(6) The opacity from stacks 7 and 8 shall not exceed three percent (3%) opacity based on a six-minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9). Compliance with this limitation satisfies the opacity limitations required by 326 IAC 5-1 (Opacity Limitations).

(c) Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements) and PSD/SSM 107-24348-00038, the Tundish Nozzle Preheaterss (TPH1 through TPH4) shall comply with the following BACT requirements:

(1) The Tundish Nozzle Preheaters (TPH1 through TPH4) shall only burn natural gas, except as specified below, and shall be limited to 0.8 million Btu per hour heat input each.

(2) PM/PM10 emissions from the Tundish Nozzle Preheaters (TPH1 through TPH4) shall be limited to 7.6 pounds per million cubic feet of natural gas burned, 0.02 pounds per hour (total).

(3) NOx emissions from the Tundish Nozzle Preheaters (TPH1 through TPH4) shall be limited to 100 pounds per million cubic feet of natural gas burned, 0.32 pounds per hour (total.

(4) CO emissions from the Tundish Nozzle Preheaters (TPH1 through TPH4) shall be limited to 84 pounds per million cubic feet of natural gas burned, 0.27 pounds per hour (total).

(5) VOC emissions from the Tundish Nozzle Preheaters (TPH1 through TPH4) shall be limited to 5.5 pounds per million cubic feet of natural gas burned, 0.02 pounds per hour (total).

(6) SO2 emission from the Tundish Nozzle Preheaters (TPH1 through TPH4) shall be limited to 0.6 lb per million cubic feet of natural gas burned, 0.002 pounds per hour (total).

(7) Visible emissions shall not exceed 5% opacity, based on a 6-minute average.

(8) The Tundish Nozzle Preheaters (TPH1 through TPH4) shall only burn propane as a back-up fuel.

(d) Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements) and PSD/SSM 107-24348-00038, the Tundish Preheaterss (TP1 through TP5) shall comply with the following BACT requirements:

(1) The Tundish Preheaters (TP1 through TP5) shall only burn natural gas, except as specified below, and shall be limited to 6.0 million Btu per hour heat input each.

(2) PM/PM10 emissions from the Tundish Preheaters (TP1 through TP5) shall be limited to 7.6 pounds per million cubic feet of natural gas burned, 0.23 pounds per hour (total).

(3) NOx emissions from the Tundish Preheaters (TP1 through TP5) shall be limited to 100 pounds per million cubic feet of natural gas burned, 3.0 pounds per hour (total).

(4) CO emissions from the Tundish Preheaters (TP1 through TP5) shall be limited to 84 pounds per million cubic feet of natural gas burned, 2.5 pounds per hour (total).

(5) VOC emissions from the Tundish Preheaters (TP1 through TP5) shall be limited to 5.5 pounds per million cubic feet of natural gas burned, 0.165 pounds per hour (total).

(6) SO2 emissions from the Tundish Preheaters (TP1 through TP5) shall be limited to 0.6 lb per million cubic feet of natural gas burned, 0.02 pounds per hour (total).

(7) Visible emissions shall not exceed 5% opacity, based on a 6-minute average.

(8) The Tundish Preheaters (TP1 through TP5) shall only burn propane as a back-up fuel.

D.32.4 Tundish Dryout Station (TD #1) PSD BACT [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements) and PSD/SSM 107-24348-00038, the Tundish Dryout Stations (TD #1 and TD #2) shall comply with the following BACT requirements:

(a) The Tundish Dryout Station (TD #1 and TD #2) shall only burn natural gas, except as specified below, and shall be limited to 9.0 million Btu per hour heat input each.

(b) PM/PM10 shall be limited to 7.6 pounds per million cubic feet of natural gas burned, 0.14 pounds per hour (total), and 0.6 tons per year (total).

(c) NOx emissions shall be limited to 100 pounds per million cubic feet of natural gas burned, 1.8 pounds per hour (total), and 7.9 tons per year (total).

(d) CO emissions shall be limited to 84 pounds per million cubic feet of natural gas burned, 1.5 pounds per hour, and 6.6 tons per year (total).

(e) VOC emissions shall be limited to 5.5 pounds per million cubic feet of natural gas burned, 0.1 pounds per hour, 0.43 tons per year (total).

(f) SO2 emission shall be limited to 0.6 lb per million cubic feet of natural gas burned, 0.01 pounds per hour (total), and 0.05 tons per year (total).

(g) Visible emissions shall not exceed 5% opacity, based on a 6-minute average.

(h) The Tundish Dryout Stations (TD #1 and TD #2) shall only burn propane as a back-up fuel.

D.32.5 PSD Limit [326 IAC 2-2]

The combined input of propane to emission units TD #3, MD #1, and MD #2, combined with the input of propane to annealing furnace AN-19 (permitted in Section D.21) shall be limited to less than 1,089 thousand gallons of propane (LPG) per twelve consecutive month period, with compliance determined at the end of each month. NOx emissions shall not exceed 0.208 pounds per MMBtu when burning propane. Compliance with this limit will ensure that the potential to emit from the modification performed under SSM 107-23609-00038 is less than forty (40) tons of NOx per year and will render the requirements of 326 IAC 2-2 (PSD) not applicable.

D.32.6 Meltshop LMF PSD BACT for Metals [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements), the Permittee shall comply with the following BACT requirements:

(a) The lead emissions from the LMF baghouse controlling the two (2) LMFs, identified as EU-13 (a) and (b), shall be limited to 0.00048 pound per ton of steel produced and 0.24 pound per hour, based on a 3-hour block average.

(b) The Mercury emissions from the LMF baghouse controlling the two (2) LMFs, identified as EU-13 (a) and (b) shall be limited to 0.04 pound per hour, based on a 3-hour block average.

(c) The Beryllium emissions from the LMF baghouse controlling the two (2) LMFs, identified as EU-13 (a) and (b) shall be limited to 0.002 pound per hour, based on a 3-hour block average.

(d) The Fluorides emissions from the LMF baghouse controlling the two (2) LMFs, identified as EU-13 (a) and (b) shall be limited to 0.01 pound per ton of steel produced and 5.02 pounds per hour, based on a 3-hour block average.

The fluorides emissions from the LMFs shall be minimized by using granular Fluorspar, to minimize fluorides emissions and it shall be applied at a rate of 500 pounds/heat at the LMFs.

(e) The emissions from lead and mercury shall be minimized in accordance with the Scrap Management Program (SMP) and

(f) The emissions from the Meltshop LMFs shall be controlled by a baghouse.

D.32.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan (PMP), in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the LMFs (EU-13) and their control devices.

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.32.8 Meltshop LMFs PSD BACT [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements), the Permittee shall comply with the following BACT requirements:

(a) The Meltshop LMF Baghouse shall operate at all times that at least one of the Meltshop LMFs (EU-13) is operating, except during the times that one of the Meltshop EAF Baghouses serves as a back up.

(b) Good working practices shall be observed.

D.32.9 Testing Requirements [326 IAC 2-7-6(1),(6)]

Within sixty (60) days but no later than one hundred and eighty (180) days after the initial start up of the modified LMFs EU-13 (a) and (b) permitted in this PSD/SSM No. 107-24348-00038**,** the Permittee shall perform a compliance test on the Meltshop LMFs baghouse stack (S-13), for the following pollutants utilizing methods as approved by the Commissioner:

(a) With the submission of the test protocol, at a minimum, the Permittee shall include estimates of the sulfur content of the raw materials to be used in testing and the sulfur content of the raw materials used from previous year.

(b) Any stack which has multiple processes which exhaust to the same stack shall operate shall of the processes simultaneously in accordance with 326 IAC 3-5 (Source Sampling Procedures).

(c) Lead, Mercury, Beryllium and Fluorides in order to comply with Condition 32.6.

(d) The PM, PM10, NOx, CO, VOC, Lead, Mercury, Beryllium and Fluorides tests shall be repeated at least once every 2.5 years from the date of a valid compliance demonstration.

(e) These tests shall be performed using methods as approved by the Commissioner.

(f) Testing shall be conducted in accordance with Section C - Performance Testing.

D.32.10 Sulfur Content [326 IAC 2-7-5(3)(A)(iii)][326 IAC 2-7-5(d)]

The Permittee shall monitor the sulfur content of the charge carbon and injection carbon added to the LMFs. Vendor certifications or analyses may verify the sulfur content of the charge carbon and injection carbon.

D.32.11 SO_2 Continuous Emission Rate Monitoring Requirement [326 IAC 2-2[[326 IAC 3-5]

(a) The Permittee shall install, calibrate, certify, operate, and maintain continuous emissions monitoring systems (CEMS) for measuring SO_2 emissions rates in pounds per hour from the Meltshop LMFs, EU-13 (a) and (b) in accordance with 326 IAC 3-5-2 and 326 IAC 3-5-3.

The Permittee shall comply with the PSD BACT SO_2 hourly emission rates by averaging the CEMS readings based on the actual hours of operation in a 24-hour period.

(1) The CEMS shall be calibrated within sixty (60) days but no later than one hundred eighty (180) days after the issuance of PSD/SSM NO. 107-24348-00038.

(2) The location of the CEMS to measure the Meltshop LMFs SO_2 emissions shall be approved by OAQ prior to their installation.

(b) The Permittee shall submit to IDEM, OAQ, within ninety (90) days after monitor installation, a complete written continuous monitoring standard operating procedure (CMSOP), in accordance with the requirements of 326 IAC 3-5-4.

(c) The Permittee shall record the output of the system in pounds per hour and shall perform the required record keeping and reporting, pursuant to 326 IAC 3-5-6 and 326 IAC 3-5-7.

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

D.32.12 Visible Emissions Notations [326 IAC 2-7-5(3)(A)(iii)][326 IAC 2-7-5(d)]

(a) Visible emission notations of the Meltshop LMF Baghouse 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 steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

D.32.13 Baghouses Parametric Monitoring [326 IAC 2-7-5(3)(A)(iii)][326 IAC 2-7-5(d)]

The Permittee shall record the pressure drop across the Meltshop LMF Baghouse used in conjunction with the Meltshop LMFs EU-13 (a) and (b), at least once per day, when one or more of the Meltshop LMFs is in operation. When for any one reading, the pressure drop across the baghouse is outside the range of 1 and 10 inches of water or a range established during the latest stack test, the Permittee shall take reasonable steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from 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, and shall be calibrated at least once annually.

The instrument used for determining the pressure shall have a range higher than 10 inches of water to accurately measure the range.

D.32.14 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 unit has 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 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).

Bag failure can be indicated by a significant drop in the baghouse 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.32.15 Maintenance of CEMS [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown for the LMFs EU-13 (a) and (b) SO_2 continuous emission monitoring system (CEMS) occurs, the Permittee shall maintain records of all CEMS malfunctions, out of control periods, calibration and adjustment activities, and repair or maintenance activities.

(b) The continuous emissions monitoring system (CEMS) shall be operated at all times the emissions unit or process is operating except for reasonable periods of monitor system downtime due to necessary calibration or maintenance activities or malfunctions. Calibration and maintenance activities shall be conducted pursuant to the standard operating procedures under 326 IAC 3-5-4(a).

(c) Except as otherwise provided by a rule or provided specifically in this permit, whenever a continuous emission monitor system (CEMS) is malfunctioning or will be down for calibration, maintenance, or repairs for a period of four (4) hours or more, the Permittee shall perform supplemental monitoring by using calibrated handheld monitors to measure the SO_2 emissions on a once per shift basis, unless the CEMS operation is restored prior to the end of the shift.

The handheld monitors shall be approved by the IDEM, OAQ.

(d) The Permittee shall keep records in accordance with 326 IAC 3-5-6(b) that includes the following:

(1) All documentation relating to:

(A) design, installation, and testing of all elements of the monitoring system; and

(B) required corrective action or compliance plan activities.

(2) All maintenance logs, calibration checks, and other required quality assurance activities.

(3) All records of corrective and preventive action.

(4) A log of plant operations, including the following:

(A) Date of facility downtime.

(B) Time of commencement and completion of each downtime.

(D) Reason for each downtime.

(e) The Permittee shall keep records that describe the supplemental monitoring implemented during the downtime to assure compliance with applicable emission limitations.

(f) In accordance with 326 IAC 3-5-7(5), the Permittee shall submit reports of continuous monitoring system instrument downtime, except for zero (0) and span checks, which shall be reported separately.

The reports shall include the following:

(1) Date of downtime.

(2) Time of commencement.

(3) Duration of each downtime.

(4) Reasons for each downtime.

(5) Nature of system repairs and adjustments.

(g) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5, 326 IAC 2-2, and 40 CFR Part 60.

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

D.32.16 Record Keeping Requirements

(a) To document compliance with Condition D.32.12, the Permittee shall maintain once per day records of visible emission notation readings at the Meltshop LMF Baghouse stack exhaust and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) To document compliance with Condition D.32.13, the Permittee shall maintain records of once per day total static pressure drop during normal operation and the reason for the lack of pressure drop notation (e.g. the process did not operate that day).

(c) To document compliance with Condition D.32.5, the Permittee shall maintain records of the actual quantity of propane (LPG) used in the emission units identified as TD #3, MD #1, and MD #2. Records shall be taken monthly and shall be complete and sufficient to establish compliance with the limit established in Condition D.32.5. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(d) To document compliance with Condition D.32.6(d), the Permittee shall maintain records of the amount of Fluorspar applied at the LMFs.

(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.32.17 Reporting Requirements

A monthly summary of the information to document compliance with Condition D.32.5 shall be submitted quarterly 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 thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.33 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

INSIGNIFICANT ACTIVITIES – MELTSHOP

(n) Activities with emissions equal to or less than the thresholds provided in 326 IAC 2-7-1(21):

(1) Ladle tap hole cleaning and repair.

(2) Ladle/tundish refractory application and curing.

(3) Tundish dumping.

(4) Ladle dumping.

(5) Ladle/tundish refractory loading and removal.

(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.33.1 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate emissions from ladle tap hole cleaning and repair, ladle/tundish refractory application and curing, tundish dumping, and ladle dumping shall not exceed a pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission is pounds per hour and
P = process weight rate in tons per hour

SECTION E.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

COLD MILL – COLD MILL BOILER (CMB#2)

(aa) One (1) natural gas fueled Cold Mill Boiler (CMB #2), identified as EU-19, with a heat input capacity of 40.0 MMBtu per hour, with emissions exhausting to stack S-23. Propane is used as a back-up fuel. The Cold Mill Boiler (CMB #2) is permitted to be installed in 2007

Under 40 CFR Part 60, Subpart Dc, this unit is considered a steam generating unit.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

E.1.1 General Provisions Relating to NSPS [326 IAC 12-1-1] [40 CFR Part 60, Subpart A]

The Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1-1, for the Cold Mill Boiler (CMB #2) rated at 40.0 MMBtu/hr, as specified in Appendix A of 40 CFR Part 60, Subpart Dc in accordance with schedule in 40 CFR Part 60, Subpart Dc.

E.1.2 Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units [40 CFR Part 60, Subpart Dc]

Pursuant to 40 CFR Part 60, Subpart Dc, the Cold Mill Boiler (CMB #2) rated at 40.0 MMBtu/hr shall comply with the following provisions:

Subpart Dc— Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

§ 60.40c Applicability and delegation of authority.

(a) Except as provided in paragraph (d) 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 Btu per hour (Btu/hr)) or less, but greater than or equal to 2.9 MW (10 million Btu/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.

(f) Any facility covered by subpart AAAA of this part is not covered 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 covered by this subpart.

§ 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 D388–77, 90, 91, 95, or 98a, Standard Specification for Classification of Coals by Rank (IBR—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, 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 D396–78, 89, 90, 92, 96, or 98, “Standard Specification for Fuel Oils” (incorporated by reference—see §60.17).

Dry flue gas desulfurization technology means a sulfur dioxide (SO_2) control 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 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_2 control 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 40 CFR 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 D1835–86, 87, 91, or 97, “Standard Specification for Liquefied Petroleum Gases” (incorporated by reference—see §60.17).

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_2 emissions (nanograms per joule [ng/J], or pounds per million Btu [lb/million Btu] 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 D396–78, 89, 90, 92, 96, or 98, “Standard Specification for Fuel Oils” (incorporated by reference—see §60.17).

Steam generating unit means a device that combusts any fuel and produces steam or heats water or any other 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_2 control 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 particulate matter (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.

§ 60.43c Standard for particulate matter.

(e)(1) On or 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, gas, 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/h) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain particulate matter emissions in excess of 13 ng/J (0.030 lb/MMBtu) heat input, except as provided in paragraphs (e)(2) and (e)(3) of this section. Affected facilities subject to this paragraph, are also subject to the requirements of paragraphs (c) and (d) 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 performance test required to be conducted under §60.8 is completed, the owner or operator subject to the provisions of this subpart shall not cause to be discharged into the atmosphere from any affected facility for which modification commenced after February 28, 2005, any gases that contain particulate matter in excess of:

(i) 22 ng/J (0.051 lb/MMBtu) heat input derived from the combustion of coal, oil, gas, 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, gas, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels.

§ 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) and (d) of this section.

(1) Method 1 shall be used to select the sampling site and the number of traverse sampling points.

(2) Method 3 shall be used for gas analysis when applying Method 5, Method 5B, or Method 17.

(3) Method 5, Method 5B, or Method 17 shall be used to measure the concentration of PM as follows:

(i) Method 5 may be used only at affected facilities without wet scrubber systems.

(ii) Method 17 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 may be used in Method 17 only if Method 17 is used in conjunction with a wet scrubber system. Method 17 shall not be used in conjunction with a wet scrubber system if the effluent is saturated or laden with water droplets.

(iii) Method 5B 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 Method 5B, 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 or carbon dioxide measurement shall be obtained simultaneously with each run of Method 5, Method 5B, or Method 17 by traversing the duct at the same sampling location.

(7) For each run using Method 5, Method 5B, or Method 17, the emission rates expressed in ng/J (lb/million Btu) heat input shall be determined using:

(i) The oxygen or carbon dioxide measurements 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 (appendix A).

(c) Units that burn only oil containing no more than 0.5 weight percent sulfur or liquid or gaseous fuels with potential sulfur dioxide emission rates of 230 ng/J (0.54 lb/MMBtu) heat input or less are not required to conduct emissions monitoring if they maintain fuel supplier certifications of the sulfur content of the fuels burned.

(d) In place of particulate matter testing with EPA Reference Method 5, 5B, or 17, an owner or operator may elect to install, calibrate, maintain, and operate a continuous emission monitoring system for monitoring particulate matter 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 particulate matter emissions instead of conducting performance testing using EPA Method 5, 5B, or 17 shall install, calibrate, maintain, and operate a continuous emission monitoring system and shall comply with the requirements specified in paragraphs (d)(1) through (d)(13) 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 the continuous monitoring system if the owner or operator was previously determining compliance by Method 5, 5B, or 17 performance tests, whichever is later.

(5) The owner or operator of an affected facility shall conduct an initial performance test for particulate matter emissions as required under §60.8 of subpart A of this part. Compliance with the particulate matter emission limit shall be determined by using the continuous emission monitoring system specified in paragraph (d) of this section to measure particulate matter and calculating a 24-hour block arithmetic average emission concentration using EPA Reference Method 19, section 4.1.

(6) Compliance with the particulate matter emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using continuous emission monitoring system outlet data.

(7) At a minimum, valid continuous monitoring system hourly averages shall be obtained as specified in paragraph (d)(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 (d)(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 continuous emission monitoring system data shall be used in calculating average emission concentrations even if the minimum continuous emission monitoring system data requirements of paragraph (d)(7) of this section are not met.

(10) The continuous emission monitoring system shall be operated according to Performance Specification 11 in appendix B of this part.

(11) During the correlation testing runs of the continuous emission monitoring system required by Performance Specification 11 in appendix B of this part, particulate matter and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraph (d)(7)(i) of this section.

(i) For particulate matter, EPA Reference Method 5, 5B, or 17 shall be used.

(ii) For oxygen (or carbon dioxide), EPA reference Method 3, 3A, or 3B, 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 particulate matter emissions data are not obtained because of continuous emission monitoring system 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 to provide, as necessary, valid emissions data for a minimum of 75 percent of total operating hours on a 30-day rolling average.

§ 60.47c Emission monitoring for particulate matter.

(c) Units that burn only oil that contains no more than 0.5 weight percent sulfur or liquid or gaseous fuels with potential sulfur dioxide emission rates of 230 ng/J (0.54 lb/MMBtu) heat input or less are not required to conduct PM emissions monitoring if they maintain fuel supplier certifications of the sulfur content of the fuels burned.

§ 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, anticipated startup, 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.

(b) The owner or operator of each affected facility subject to the SO_2 emission 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.

(g) The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day. The owner or operator of an affected facility that only burns very low sulfur fuel oil or other liquid or gaseous fuels with potential sulfur dioxide emissions rate of 140 ng/J (0.32 lb/MMBtu) heat input or less shall record and maintain records of the fuels combusted during each calendar month.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Nucor Steel
Source Address: 4537 South Nucor Road, Crawfordsville, Indiana 47933
Mailing Address: 4537 South Nucor Road, Crawfordsville, Indiana 47933
Part 70 Permit No.: T107-7172-00038

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)

☐ Report (specify)

☐ Notification (specify)

☐ Affidavit (specify)

☐ 40 CFR 63, Subpart DDDDD

☐ 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 BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
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PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name:	Nucor Steel
Source Address:	4537 South Nucor Road, Crawfordsville, Indiana 47933
Mailing Address:	4537 South Nucor Road, Crawfordsville, Indiana 47933
Part 70 Permit No.:	T107-7172-00038

This form consists of 2 pages **Page 1 of 2**

☐ This is an emergency as defined in 326 IAC 2-7-1(12)

X 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

X The Permittee must submit notice in writing or by facsimile within two (**2**) working 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
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: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT
SEMI-ANNUAL NATURAL GAS FIRED BOILER CERTIFICATION

(Applicable for boilers > or = 10 MMBtu per hour that can burn both natural gas and other fuels . The natural gas fired boiler certification is not required for boilers that can physically only burn natural gas.)

Source Name:	Nucor Steel
Source Address:	4537 South Nucor Road, Crawfordsville, Indiana 47933
Mailing Address:	4537 South Nucor Road, Crawfordsville, Indiana 47933
Part 70 Permit No.:	T107-7172-00038

☐ Natural Gas Only
☐ Alternate 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:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Nucor Steel
Source Address: 4537 South Nucor Road, Crawfordsville, Indiana 47933
Mailing Address: 4537 South Nucor Road, Crawfordsville, Indiana 47933
Part 70 Permit No.: T107-7172-00038
Facility: The steel mill service screen and conveyor system
Parameter: Steel Mill related material throughput
Limit: Less than 1,092,000 tons per 12 consecutive month period.

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: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Nucor Steel
Source Address: 4537 South Nucor Road, Crawfordsville, Indiana 47933
Mailing Address: 4537 South Nucor Road, Crawfordsville, Indiana 47933
Part 70 Permit No.: T107-7172-00038
Facility: Meltshop Electric Arc Furnaces
Parameter: Steel Production – tons of steel poured/tapped per twelve (12) consecutive month period
Limit: 4,397,520 tons of steel

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: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Nucor Steel
Source Address: 4537 South Nucor Road, Crawfordsville, Indiana 47933
Mailing Address: 4537 South Nucor Road, Crawfordsville, Indiana 47933
Part 70 Permit No.: T107-7172-00038
Facility: Strip Caster Line
Parameter: Steel Throughput/Production Limitation
Limit: 2,365,200 tons steel processing per year, based on a twelve (12) consecutive month period

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: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Nucor Steel
Source Address: 4537 South Nucor Road, Crawfordsville, Indiana 47933
Mailing Address: 4537 South Nucor Road, Crawfordsville, Indiana 47933
Part 70 Permit No.: T107-7172-00038
Facility: Cold Reversing Mill 1
Parameter: Mill steel throughput
Limit: 2,190,000 tons per 12 consecutive month period.

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: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Nucor Steel
Source Address: 4537 South Nucor Road, Crawfordsville, Indiana 47933
Mailing Address: 4537 South Nucor Road, Crawfordsville, Indiana 47933
Part 70 Permit No.: T107-7172-00038
Facility: Reversing and Tempering (R/T) Mill (a.k.a Cold Reversing Mill 2)
Parameter: Mill steel throughput
Limit: 2,190,000 tons per twelve (12) consecutive month period.

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: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Nucor Steel
Source Address: 4537 South Nucor Road, Crawfordsville, Indiana 47933
Mailing Address: 4537 South Nucor Road, Crawfordsville, Indiana 47933
Part 70 Permit No.: T107-7172-00038
Facility: Four (4) annealing furnaces identified as HM #1-HM #4
Parameter: Total Natural Gas Equivalent Usage
Limit: 484 million cubic feet of natural gas per twelve (12) consecutive month period.

NG equivalent conversion factor:
1 million cubic feet of natural gas = 5.42 thousand gallons propane

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Natural Gas Usage			
Propane Usage			
Natural Gas Equivalent Usage			
Month 2			
Natural Gas Usage			
Propane Usage			
Natural Gas Equivalent Usage			
Month 3			
Natural Gas Usage			
Propane Usage			
Natural Gas Equivalent Usage			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report - KELLY

Source Name: Nucor Steel
Source Address: 4537 South Nucor Road, Crawfordsville, Indiana 47933
Mailing Address: 4537 South Nucor Road, Crawfordsville, Indiana 47933
Part 70 Permit No.: T107-7172-00038
Facility: AN-19, TD #3, MD #1, and MD #2
Parameter: Propane combusted
Limit: 1,089 thousand gallons per twelve consecutive month period.

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:

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Nucor Steel
Source Address: 4537 South Nucor Road, Crawfordsville, Indiana 47933
Mailing Address: 4537 South Nucor Road, Crawfordsville, Indiana 47933
Part 70 Permit No.: T107-7172-00038

Months: _____ to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, 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: _____

Attach a signed certification to complete this report.

Attachment A

Fugitive Dust Control Plan
Approved March 28, 1999

NUCOR Steel
4537 South Nucor Road
Crawfordsville, Indiana 47842

SECTION 1 — INTRODUCTION

The following control plan, when implemented is designed to reduce uncontrolled fugitive dust, based on a PM10 mass emission rate basis. From paved roadways and parking lots by at least 50 percent and down to 16.8 pounds of silt per mile, unpaved roadways and traveled open areas by at least 90 percent instantaneous control, and storage piles and slag processing operations by 97 percent.

The plan shall be implemented on a year-round basis until such time as another plan is approved or ordered by the Indiana Department of Environmental Management (IDEM).

The person on site who is responsible for implementing the plan is:

NUCOR Steel	Whitesville Mill Service (Slag Processing)
Environmental Manager	Plant Manager
4537 South Nucor Road	4537 South Nucor Road
Crawfordsville, Indiana 47933-9450	Crawfordsville, Indiana 47933-9450
Telephone: (765) 361-2659	Telephone: (765) 364-9251

SECTION 2 — PAVED ROADS AND PARKING LOTS

Paved roads and parking lots are indicated on the attached site plan. Dust from these sources shall be controlled by the use of a vehicular sweeper and shall be performed at least once every 14 days to achieve the limit of 16.8 pounds of silt per mile. The average daily traffic on these roads is anticipated up to 350 trucks per day and 400 automobiles per day.

On request of the Assistant Commissioner, NUCOR shall sample and provide to IDEM surface material silt content and surface dust loadings in accordance with field and laboratory procedures given in Reference 1. IDEM will have the right to specify road segments to be sampled. NUCOR shall provide supplemental cleaning of paved road sections found to exceed the controlled silt surface loading of 16.8 pounds of silt per mile.

Exceptions — Cleaning of paved road segments and parking lots may be delayed by one day when:

(a) 0.1 or more inches of rain has accumulated during the 24-hour period prior to the scheduled cleaning.

(b) The road segment is closed or abandoned. Abandoned roads will be barricaded to prevent vehicle access.

(c) It is raining at the time of the scheduled cleaning.

SECTION 3 — UNPAVED ROADS

Unpaved roads at the slag processing facility shall be treated with an asphaltic emulsion petroleum resin, chemical dust suppressant, or water application. Unpaved roads outside of the slag processing area are maintenance roads that will be tarred-and-chipped, treated with asphaltic emulsion, petroleum resin chemical dust suppressant, or watered as needed for dust control due to moderate or light usage.

Control Requirements

1. Slag Processing Facility Unpaved Roads - All roads in the slag processing facility shall be unpaved and treated with an asphaltic emulsion, petroleum resin, chemical dust suppressant, or watered as needed. The program shall be implemented at the following rate:

Table 3-1

Material	Rate	Frequency
Asphalatic Emulsion	0.14 gal/yd^2	Once/Month (see below)
Petroleum Resin	0.14 gal/yd^2	Once/Month (see below)
Chemical Dust Suppressant	As Specified	Once/Month
Water	As Necessary	As Necessary

As an alternative, NUCOR may pave previously unpaved road sections and apply paved road cleaning measures to these newly paved roads at frequencies similar to existing paved roads in the immediate area.

2. Moderate Use of Roads - Fugitive dust emissions from unpaved roads receiving moderate usage shall be controlled to at least 90 percent instantaneous control, based on a PM10 mass emission basis, by tarring-and-chipping, treatment with an asphaltic emulsion, petroleum resin, chemical dust suppressant, or water application as specified below:

Table 3-2

Material	Rate	Frequency
Tarring-and-Chipping	As Necessary	Once/Month
Asphaltic Emulsion	0.14 gal/yd^2	Once/Month (see below)
Petroleum Resin	0.14 gal/yd^2 initial 0.14 gal/yd^2 subsequent	Once/Month (see below)
Chemical Dust Suppressant	As Specified	Once/Month (see below)
Water	As Necessary	As Necessary

As an alternative, NUCOR may pave previously unpaved road sections and apply paved road cleaning measures to these newly paved roads at frequencies similar to existing paved roads in the immediate area.

3. Light Use Maintenance Roads - Fugitive dust emissions from unpaved roads receiving light usage shall be controlled by an asphaltic emulsion, petroleum resin, chemical dust suppressant, or water as necessary to prevent excessive visible fugitive emissions.

Exceptions - Treating of unpaved road segments may be delayed by one day when:

(a) 0.1 or more inches of rain has accumulated during the 24-hour period prior to the scheduled treatment.

(b) The road segments are saturated with water such that the asphaltic emulsion, petroleum resin, or chemical dust suppressant cannot be accepted by the surface.

(c) The road segments are frozen or covered by ice, snow, or standing water.

(d) The road segment or area is closed or abandoned. Abandoned roads shall be barricaded.

(e) It is raining at the time of the scheduled treatment. Approved Control Methods

Approved Control Methods

The asphaltic emulsion, petroleum resin, and chemical dust suppressant products currently approved by IDEM for the use at NUCOR are as follows:

(a) Soil Cement

(b) Calcium Chloride

(c) Road Pro

(d) Petrotac

(e) Coherex

(f) Hydro_Pine

Application rates and frequencies of the approved product, approved equivalent or water shall be sufficient to provide at least 90 percent instantaneous dust control.

2. Tarring-and-Chipping —Tarring-and-chipping shall be applied once to any road segment consistent with good engineering practice and maintained as necessary to ensure fugitive dust control.

3. Asphaltic Emulsion — An asphalt emulsion product shall be applied at the frequency stated in Tables 3-1 or 3-2 from April through October, unless conditions require increase frequency or as required by IDEM or EPA to ensure fugitive dust control. Asphalt emulsion products shall be applied at a rate of 0.14 gallons per square yard per treatment.

4. Petroleum Resin — Petroleum resin products shall be applied at the frequency stated in Tables 3-1 or 3-2 from April through October, unless conditions require increased frequency or as required by IDEM or EPA to ensure fugitive dust control. Petroleum resin products shall be applied at a rate of 0.14 gallons per square yard for the initial treatment and 0.12 gallons per square yard for all subsequent treatments, with the second treatment immediately following the initial treatment.

5. Chemical Dust Suppressant — Commercially produced chemical dust suppressants specifically manufactured for that purpose and approved for use, in writing, by IDEM shall be applied at the rate and frequency specified in the manufacturer's instructions or the IDEM written approval from April through October.

6. Approved Equivalents — No asphaltic emulsion product, petroleum resin product, or chemical dust suppressant shall be used as an equivalent to those listed above without the prior written approval of IDEM.

SECTION 4 – UNPAVED AREAS

Unpaved areas traveled about stockpiles shall be treated with chemical dust suppressant, asphaltic emulsion, or watered. Fugitive dust emissions shall be reduced by at least 90 percent instantaneous control on a PM10 mass emission basis.

Material	Rate	Avg. Daily Travel	Frequency
Asphaltic Emulsion	0.14 gal/yd^2	25-35 Vehicles	Once/Month (see below)
Chemical Dust Suppression	--		
Water	As Necessary		As Necessary

Exceptions — Treatment of unpaved areas may be delayed by one day when:

(a) 0.1 or more inches of rain has accumulated during the 24-hour period prior to the scheduled treatment.

(b) Unpaved areas are saturated with water such that chemical dust suppressant cannot be accepted by the surface.

(c) Unpaved areas are frozen or covered by ice, snow, or standing water.

(d) The area is closed or abandoned.

(e) It is raining at the time of the scheduled treatment.

SECTION 5 - OPEN AGGREGATE PILES

Open aggregate piles consist of slag in various stages of processing. To maintain product quality and chemical stability, watering the stockpiles shall be the primary means of dust control. Water must be limited so as to keep the moisture content of the product within standards. The total acres of piled material is 10 acres.

Pile Material	Moisture %	Silt %
Raw	2-5	1
Plus 4 inches	1-5	<1
5/8” x 2”	1-5	<1
0’ x ½”	1-5	<1
Mill Scale	1-5	1-3
Debris	2-5	4-6
AOD Slag	1-5	5-10
Refractory	0-1	1-3

Wind Erosion — Visible emissions from the storage piles shall be controlled by the application of water. Water added to the product during processing provides added control. Visible emissions shall be determined in accordance with the procedure specified in Method 9. These limitations may not apply during periods when application of fugitive particulate control measures are either ineffective orunreasonable due to sustained very high wind speeds. During such periods, the Permittee must continue to implement all reasonable fugitive particulate control measures.

SECTION 6 — SLAG PROCESSING

The following individual operations make up the slag processing operations:

1. Transfer of Cushion Material to Slag Pot — Visible emissions shall be controlled by minimizing the drop height of the bucket and by dumping the bucket slowly.

2. Transfer of Liquid Slag from EAF to Slag Pot — Visible emissions shall be controlled by the EAF shop building. The visible emissions associated with the slag that is dug out of the slag pits located beneath each EAF shall be controlled by minimizing the drop height of the bucket and by dumping the bucket slowly.

3. Transfer of Liquid Slag to Slag Pit — Visible emissions shall be controlled by limiting the rate of pouring and by applying water to the slag pit after the molten slag has been completely dumped from the slag pot to the slag pit.

4. Slag Pit Transfer Activities — Visible emissions shall be controlled by watering of the slag pit.

5. Skull Pit Activities — Application of water to the skull pit activities, including removal of skull and transfer of skull, is prohibitive due to safety reasons because the materials are reused.

6. Screening and Crushing Operation — Visible emissions shall be controlled through the application of water via spray bars.

7. Processed Slag Transfer Activities — Visible emissions shall be controlled by limiting the drop height and rate the material is dumped, and controlling the rate at which the material is picked up.

8. Material Transportation Activities — Visible emissions from the material during inplant transportation shall be controlled by limiting the speed of the hauling equipment, covering the material if necessary, and limiting the bucket height during transport of the material if necessary.

SECTION 7 — VEHICLE SPEED CONTROL

Speed limits on paved roads shall be posted to be 20 miles per hour. Speed limits on unpaved roads shall be 10 miles per hour.

Compliance with these speed limits shall be monitored by plant guards and safety department. Upon violation, employees shall receive written warning, followed by a one-day suspension if continued violations occur. Visitors to the plant shall be denied access if repeated violations occur.

SECTION 8 — MATERIAL SPILL CONTROL

Incidents of material spillage on plant property shall be investigated by the person responsible for implementing the plan. That person shall arrange for prompt cleanup and shall contact the party responsible for the spill to insure that corrective action has been taken.

SECTION 9 - MONITORING AND RECORD KEEPING

Records shall be kept within a journal which will e updated on a regular basis by the environmental engineer of his/her designs. The journals shall include sweeping and spill control activities, and dust suppressant application frequency. Also, the journal shall contain the total amount of water sprayed on the aggregate piles, and the slag processing spray bars. The journals shall be kept in storage for a minimum of three (3) years and shall be available for inspection or copying upon reasonable prior notice.

SECTION 10 - COMPLIANCE SCHEDULE

This plan shall be fully implemented when construction is completed. Until that time, the plan shall be implemented within portions of the site where construction is considered complete. Where construction is incomplete, appropriate control measures shall be implemented, but cannot be comprehensively addressed. These activities shall be included in the engineering journal.

SECTION 11 - UNPAVED ROADWAY AND UNPAVED AREA OPACITY LIMITS

Visible emissions from any unpaved road segment or unpaved area shall not exceed 5 percent opacity as averaged over any consecutive 3-minute period. All visible emission observations shall be determined in accordance with 40 CFR 60, Appendix A, Method 9, except as otherwise provided below:

1. In viewing fugitive emissions generated by vehicular traffic, the observer shall be positioned in accordance with the provisions of paragraph 2.1 of Method 9 except that if it is an overcast day the observer need not position himself with his back to the sun.

2. The observer shall begin reading when a vehicle crosses his line of sight which shall be approximately perpendicular to the trajectory of that vehicle. The observer shall continue to observe and record visible emission opacities at 15-second intervals along that same line of sight until no less than twelve consecutive opacity readings have been obtained. If, during the 3-minute evaluation period, another vehicle passes the observers line of sight on the roadway being evaluated, the observer shall terminate the evaluation for that 3-minute period and disregard the incomplete set of readings.

3. If IDEM inspectors note opacity readings greater than 3 percent, NUCOR shall provide supplemental dust suppressant treatment of unpaved roads and parking lots within 24 hours except as provided for in Sections 3 and 4.

SECTION 12 - REFERENCES

1. C. Cowherd, Jr., et al., Iron and Steel Plant Open Dust Source Fugitive Emission Evaluation, EPA 600/2-79-103, U.S. Environmental Protection Agency Cincinnati. OH, May 1979.

Appendix B

NUCOR Steel
4537 South Nucor Road
Crawfordsville, Indiana 47842

Crawfordsville, Indiana Scrap Management Plan

Scrap Specifications

These are the specifications, exhibits, and requirements for purchased ferrous scrap. In addition to these descriptions, Nucor Crawfordsville will not accept the following:

1. **Radioactivity Scrap must be free of radioactivity**. Scrap will be screened by detection equipment at the entrance of the plant. Scrap that does not pass this screening will be quarantined awaiting disposition by the NRC.

2. **Closed Cylinders** Scrap may not contain closed cylinders of any type including tanks, shocks, gas cylinders, etc.

3. **Excessive Moisture** Scrap is to be free of excessive moisture.

4. **Excessive Oil** Scrap cannot contain excessive oil. Cutting fluids must be held to a minimum.

5. **Non-Metallics** Scrap is to be free of non-metallic items such as wood, paper, plastic, etc.

6. **Non-ferrous** Scrap is to be free of non-ferrous items such as copper, aluminum, brass, bronze, chrome, etc., unless otherwise specified.

7. **Debris** Garbage and other debris are not permissible.

Scrap must be shipped pursuant to the purchase order. Scrap delivered by truck will be received between **6:30 AM to 4:00 PM** EST. All scrap will be inspected when received. Scrap that does not conform to the specification will be rejected. If rejectable scrap is found after dumping, the scrap will be reloaded and removed from the plant.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for an Administrative Amendment to a Part 70 Operating Permit

Source Description and Location

Source Name:	Nucor Steel
Source Location:	4537 South Nucor Road, Crawfordsville, Indiana 47933
County:	Montgomery
SIC Code:	3312
Part 70 Operation Permit No.:	107-7172-00038
Part 70 Operation Permit Issuance Date:	December 29, 2006
Administrative Amendment No.:	107-26116-00038
Permit Reviewer:	Aida De Guzman

Source Definition

This steel mini-mill consists of a source with on-site contractors:

(a) Nucor Steel, the primary operation, is located at 4537 South Nucor Road, Crawfordsville, Indiana 47933;

(b) Whitesville Mill Service Company, the supporting operation, is located at 4537 South Nucor Road, Crawfordsville, Indiana, 47933;

(c) BOC Gases, the supporting operation, is located at 4537 South Nucor Road, Crawfordsville, Indiana, 47933; and

(d) Heritage Environmental Services, the supporting operation, is located at 4537 South Nucor Road, Crawfordsville, Indiana, 47933.

Existing Approvals

The source was issued Part 70 Operating Permit No. T107-7172-00038 on December 29, 2006. The source has since received the following approvals:

(a) Administrative Amendment No. 107-24009-00038, issued on January 26, 2007;

(b) First Significant Permit Modification No. 107-24022-00038, issued April 20, 2007,

(c) Second Significant Permit Modification No. 107-24284-00038, issued August 8, 2007, and

(d) Third Significant Permit Modification No. 107-24699-00038, issued on January 22, 2008.

County Attainment Status

The source is located in Montgomery County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.
[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM2.5.	

(a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC emissions and NOx are considered when evaluating the rule applicability relating to ozone. Montgomery County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NOx were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) Montgomery County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.

(c) Montgomery County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)).

(d) Fugitive Emissions
Since this type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are counted toward the determination of PSD and Emission Offset 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	Potential to Emit (tons/year)
PM	greater than 100
PM10	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 in one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).

(b) These emissions are based upon previous approvals issued to this source.

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 (tons/year)
Single HAP	greater than 10
Total HAPs	greater than 25

This existing source is a major source of HAPs, as defined in 40 CFR 63.41, 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).

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2005 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	212
PM10	212
PM2.5	212
SO_2	199
VOC	19
CO	1,443
NO_x	316
Pb	0.40

Description of Proposed Modification

The Office of Air Quality (OAQ) has received an application from Nucor Steel on February 20, 2008, relating to the replacement of the following emission units:

(a) Replacement of the burners on Shuttles No. 1 and No. 2 of the existing Tunnel Furnace system with the same heat input capacity of 26 million British thermal units per hour (MMBtu/hr).

Emission Calculations

See TSD Appendix A (Pages 1 through 4) of this document for detailed emission calculations.

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 of the modification before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

PTE Change of the Modified Tunnel Furnace			
Pollutant	**PTE New Replacement Shuttle Burners (tons/year)**	**PTE Replaced Shuttle Burners (tons/year)**	**Net PTE Increase (tons/year)**
PM	0.2	-	0.2
PM10	0.9	1.6	0.0
SO_2	0.1	0.1	0.0
VOC	0.6	0.3	0.3
CO	9.6	4.0	5.6
NO_X	11.4	11.4	0.0
Benzene	2.39E-04	2.39E-04	0.0
Dichlorobenzene	1.367E-04	1.367E-04	0.0
Formaldehyde	8.541E-03	8.541E-03	0.0
Hexane	2.050E-01	2.050E-01	0.0
Toluene	3.872E-04	3.872E-04	0.0
Cadmium	1.253E-04	1.253E-04	0.0
Chromium	1.594E-04	1.594E-04	0.0
Manganese	4.327E-05	4.327E-05	0.0
Nickel	2.391E-04	2.391E-04	0.0
Lead	5.694E-05	5.694E-05	0.0
Worst Single HAP (Hexane)	2.050E-01	2.050E-01	0.0
Combined HAPs	2.149E-01	2.149E-01	0.0

(a) The proposed shuttle burner replacement will result in a PTE net increase that is less than minor source modification levels and is considered exempt under 326 IAC 2-7-10.5. Therefore, this tunnel furnace burner replacement is subject to the requirements of an administrative amendment under 326 IAC 2-7-11.

Permit Level Determination – PSD

The table below summarizes the potential to emit, reflecting all limits, of the emission units added in this source modification. Any control equipment is considered federally enforceable only after issuance of this Part 70 source modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/Emission Unit	PM	PM10	SO_2	VOC	CO	NO_X
PTE of New Shuttle Furnace Burners	0.2	0.9	0.1	0.6	9.6	11.4
Actual Emissions Existing Shuttle Furnace Burners	-	1.0	0.0	0.2	2.6	7.3
Total Emission Change (Increase) from the Project	0.2	0.0	0.1	0.4	7.0	4.1
Significant Level	25	15	40	40	100	40

Note: In lieu of using the projected actual emissions, the source elected to use the potential to emit in calculating the project's emissions increases under 326 IAC 2-2-1(rr)(B).

(a) This modification (replacement to an existing PSD BACT unit (shuttle furnace burners)) to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Furthermore, this PSD BACT unit is not subject to a PSD BACT re-opening because it is capable of meeting its current PSD BACT limit. Therefore, PSD (326 IAC 2-2) requirements do not apply.

Federal and State Rule Applicability

This replacement of the shuttle furnaces 1 and 2 burners will not affect the federal rules and state rules that have been determined for these furnaces.

Conclusion and Recommendation

The tunnel furnace burner replacement shall remain subject to the issued Part 70 T107-7172-00038. The staff recommends to the Commissioner that this Administrative Amendment 107-26116-00038 shall be approved.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Nucor Steel
Address City IN Zip: 4537 South Nucor Road, Crawfordsville, IN 47933
Administraive Amendment No.: 107-26116
Plt ID: 107-00038
Reviewer: Aida De Guzman
Date Application Received: 20-Feb-08

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
26.0	227.8

Shuttle Furnaces No.1 and No.2

	New PTE					
	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.2	0.9	0.1	11.4	0.6	9.6

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

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MM BTU/HR <100
HAPs Emissions

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Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
26.0	227.8

Shuttle Furnaces No.1 and No.2

New PTE

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	2.391E-04	1.367E-04	8.541E-03	2.050E-01	3.872E-04

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	5.694E-05	1.253E-04	1.594E-04	4.327E-05	2.391E-04

Methodology is the same as page 1.

Worst Single HAP (Hexane)	2.050E-01
Combined HAPs	2.149E-01

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

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Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
26.0	227.8

Shuttle Furnaces No.1 and No.2

	Pollutant		Old PTE		
	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	13.7	0.6	100.0 **see below	2.8	35.0
Potential Emission in tons/yr	1.6	0.1	11.4	0.3	4.0

PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

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MM BTU/HR <100
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Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
26.0	227.8

Shuttle Furnaces No.1 and No.2

Old PTE

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	2.391E-04	1.367E-04	8.541E-03	2.050E-01	3.872E-04

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Plt ID: 107-00038
Reviewer: Aida De Guzman
Date Application Received: 20-Feb-08

Heat Input Capacity MMBtu/hr	Average Actual Throughput (last 2 years -2006 & 2007) MMCF/yr
26.0	145.765

Shuttle Furnaces No.1 and No.2

Actual Emissions

	Pollutant				
	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	13.7	0.6	100.0	2.8	35.0
			**see below		
Potential Emission in	1.0	0.0	7.3	0.2	2.6

PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50,
Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
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Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton