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

Michael R. Pence
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: January 25, 2013

RE: Consolidated Grain & Barge, Co / 129-31079-00035

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

Notice of Decision: Approval – Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

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:

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(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.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impractible to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
401 M Street
Washington, D.C. 20406

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
FNTVOP.dot12/3/07

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Part 70 Operating Permit Renewal
OFFICE OF AIR QUALITY

Consolidated Grain and Barge Co.
2781 Bluff Road
Mt. Vernon, Indiana 47620

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source 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 permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit Renewal No.: T129-31079-00035	
Issued by: Jenny Acker, Section Chief Permits Branch Office of Air Quality	Issuance Date: January 25, 2013 Expiration Date: January 25, 2018

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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.3 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(14)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary soybean oil extraction plant.

Source Address:	2781 Bluff Road, Mt. Vernon, Indiana 47620
General Source Phone Number:	(812) 833-3256
SIC Code:	2075
County Location:	Posey
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD Greenhouse Gas (GHG) potential to emit (PTE) is less than one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per year Major Source, under Section 112 of the Clean Air Act Not in 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(14)]

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

(a) Three (3) 33.7 MMBtu per hour natural gas fired boilers, identified as P17, P18, and P18A, approved in 1996 for construction, and exhausting to Stacks 17, 18, and 18A, respectively. Under NSPS, Subpart Dc, boilers P17, P18, and P18A are considered small industrial-commercial-institutional steam generating units. Under NESHAP, Subpart DDDDD, boilers P17, P18, and P18A are considered part of the existing, affected source.

(b) Two (2) wood/shredded tire fired boilers, identified as P17B and P17C, approved in 2006 for construction, each with a nominal heat input capacity of 57.3 MMBtu/hr, both controlled by one (1) electrostatic precipitator (ESP) (identified as ES1), and exhausting through Stack 17A. Stack 17A is equipped with a continuous opacity monitoring system (COMS). Under NSPS, Subpart Dc, boilers P17B and P17C are considered small industrial-commercial-institutional steam generating units. Under NESHAP, Subpart DDDDD, boilers P17B and P17C are considered part of the existing, affected source.

(c) One (1) north truck receiving area, identified as P24, approved in 2001 for construction, with a nominal throughput capacity of 360 tons per hour, controlled by baghouse C24, and exhausting to Stack 24. Under NSPS, Subpart DD, this unit is considered a truck unloading station.

(d) One (1) north house bin loading area, identified as P27, approved in 2001 for construction, with a nominal throughput capacity of 360 tons per hour, and exhausting inside the north house, consisting of the following:

(1) One (1) totally enclosed aspirated elevator leg that transfers soybeans to enclosed conveyors.

(2) Two (2) enclosed conveyors that transfer the soybean from the north receiving area to the soybean storage areas.

Under NSPS, Subpart DD, this area is considered a grain handling operation.

(e) One (1) soybean expander system, approved in 1996 for construction and approved in 2004 for modification, with a nominal capacity of 50 tons per hour. This system consists of the following:

(1) One (1) expander, forming soybean collets.

(2) One (1) totally enclosed conveying system transferring material from the expander system to the extraction system.

Under NESHAP, Subpart GGGG, these emission units are considered vegetable oil production processes.

(f) One (1) truck only soybean receiving area, identified as P1, approved in 1996 for construction, with a nominal throughput capacity of 600 tons per hour. This area consists of the following:

(1) One (1) truck only receiving pit.

(2) One (1) totally enclosed belt conveyor system (or equivalent), using an oil application to control PM emissions.

(3) One (1) aspirated soybean receiving leg, controlled by an oil application to control PM emissions and also controlled by baghouse C1, exhausting to Stack 1.

(4) One (1) enclosed belt conveyor that transfers the soybean from the receiving leg to the soybean enclosed belt conveyor.

(5) One (1) enclosed belt conveyor that loads the soybean storage silos.

Under NSPS, Subpart DD, the emission units at this area are considered a truck unloading station and grain handling operations.

(g) One (1) truck and railcar soybean receiving area, identified as P2, approved in 1996 for construction, with a nominal throughput capacity of 540 tons per hour, consisting of the following:

(1) One (1) truck and railcar receiving pit, with PM emissions controlled by restricting vehicles unloading grain at these stations to hopper-bottom rail cars and trucks with choke unloading applications.

(2) One (1) enclosed drag conveyor system (or equivalent), using an oil application to control PM emissions.

(3) Two (2) aspirated soybean receiving legs, using an oil application to control PM emissions and also controlled by baghouse C1, exhausting to Stack 1.

(4) One (1) aspirated bulkweigher, using and oil application to control PM emissions and also controlled by baghouse C1, exhausting to Stack 1.

(5) One (1) enclosed drag conveyor that transfers the soybean at a nominal rate of 540 tons per hour from the receiving leg to the soybean covered belt conveyor that loads the soybean silos.

Under NSPS, Subpart DD, the emission units at this area are considered truck and railcar unloading stations and grain handling operations.

(h) One (1) annex silo loading operation, identified as P2A, approved in 1996 for construction, with a nominal throughput rate of 1,740 tons per hour, controlled by an oil application system, and consisting of the following:

(1) Twelve (12) concrete soybean silos, each with a nominal storage capacity of 73,053 bushels.

(2) Four (4) concrete soybean storage silos, each with a nominal capacity of 19,375 bushels.

(3) Two (2) concrete soybean storage silos, each with a nominal capacity of 18,801 bushels.

(4) Three (3) totally enclosed drag conveyors (or equivalent) comprising two conveyance systems located below the storage silos that transfer the soybeans from the silos to the elevator legs.

Under NSPS, Subpart DD, this silo loading operation is considered a grain handling operation.

(i) One (1) soybean storage system, identified as P2B, approved in 2002 for construction and approved in 2009 for modification, with a nominal throughput of 600tons per hour, controlled by an oil application system, and consisting of the following:

(1) Two (2) soybean silos (P2B and P2C), with a nominal combined storage capacity of 1,177,000 bushels.

(2) Two (2) enclosed belt conveyors.

(3) Two (2) enclosed drag conveyors.

Under NSPS, Subpart DD, this soybean storage system is considered a grain handling operation.

(j) One (1) flow coating material kaolin handling operation, identified as P3, approved in 1996 for construction, controlled by baghouse C3, and exhausting to Stack 3. This operation consists of the following:

(1) One (1) flow coating material kaolin receiving bin.

(2) One (1) flow coating material enclosed conveyor system that transfers kaolin to the enclosed mixing screw conveyor, with a nominal throughput rate of 0.417 tons per hour.

(k) One (1) soybean cleaning process, identified as P4, approved in 1996 for construction, with a nominal throughput rate of 115 tons per hour, controlled by baghouse C4, and exhausting to stack C4. This system consists of the following:

(1) Two (2) soybean elevator legs that transfer the soybeans from the drag conveyor to the cleaner, using an oil application to control PM emissions.

(2) One (1) totally enclosed conveyor that transfers the soybeans from the elevator legs to the magnet.

(3) One (1) magnet, using both an oil application and baghouse C4 to control PM emissions.

(4) One (1) cleaning system, consisting of the following:

(A) Two (2) cleaners, controlled by an oil application system and baghouse C4.

(B) Two (2) aspirators, controlled by an oil application system and baghouse C4.

(C) One (1) conveyor transferring beans from the aspirator to the hopper, controlled by an oil application system and baghouse C4.

(D) One (1) hopper, controlled by an oil application system and baghouse C4.

(E) One (1) scale, controlled by an oil application system and baghouse C4.

(F) One (1) breaker, controlled by cyclone C5E, and exhausting to stack 5.

Under NSPS, Subpart DD, this cleaning system is considered a grain handling operation.

(l) One (1) soybean heater with one (1) L-Path totally enclosed drag conveyor, identified as P21, approved in 1996 for construction and approved in 2008 for replacement, with a nominal capacity of 115 tons per hour, and exhausting to Stack 21. Under NESHAP, Subpart GGGG, the soybean heater is considered vegetable oil production processes.

(m) One (1) soybean cracking and dehulling operation, identified as P5, approved in 1996 for construction, with a nominal throughput rate of 115 tons per hour, and consisting of the following:

(1) One (1) enclosed drag conveyor (or equivalent) and one (1) totally enclosed overflow recycle L-Path conveyor (or equivalent) with a totally enclosed surge hopper that transfers soybeans to the jet dryers.

(2) Three (3) jet dryers, each with a nominal capacity of 42 tons per hour, controlled by cyclones C5A, C5B, and C5F, respectively, and exhausting to Stack 5.

(3) Three (3) primary CCD dryers, controlled by cyclones C5C and C5G, and exhausting to Stack 5.

(4) Three (3) secondary CCC coolers, controlled by cyclones C5D and C5H, and exhausting to Stack 5.

(5) Six (6) cracking and dehulling rolls that transfer the hulls through four (4) cyclones (C5C, C5D, C5G, and C5H) to an enclosed conveyor.

(6) One (1) totally enclosed cracking and dehulling drag conveyor (or equivalent) that transfers hulls from cyclones C5A and C5B to the hull grinding system, with a nominal throughput rate of 8.05 tons per hour.

(7) One (1) totally enclosed cracking and dehulling drag conveyor (or equivalent) that transfers hulls and aspirated fines from cyclones C5C, C5D, C5F, C5G, C5H, and the totally enclosed auger (or equivalent) of filter C4 to the hull screener and aspirator, with a nominal throughput rate of 8.05 tons per hour.

(8) One (1) hull screener and aspirator, with a nominal throughput rate of 8.05 tons per hour, controlled by cyclone C5E, and exhausting to Stack 5.

Under NESHAP, Subpart GGGG, these units are considered vegetable oil production processes.

(n) One (1) hull grinding operation, identified as P6, approved in 1996 for construction, with a nominal throughput rate of 8.05 tons per hour, controlled by baghouse C6, and exhausting to Stack 6. This operation is consisting of the following:

(1) Two (2) hull grinders.

(2) One (1) ground hulls cyclone.

(3) One (1) totally enclosed drag conveyor (or equivalent) that transfers hulls from the ground hulls cyclone to the hull hopper.

(o) One (1) hull storage operation, identified as P7, approved in 1996 for construction, with a nominal throughput rate of 15 tons per hour, controlled by baghouse C7, and exhausting to Stack 7. This operation is consisting of the following:

(1) One (1) ground hulls blower that transfers hulls to the Hull storage bins.

(2) Hull storage bins, with a nominal capacity of 39,000 cubic feet.

(3) Two (2) totally enclosed drag conveyor (or equivalent) that transfers hulls to the ground hulls blower.

(4) One (1) ground hulls blower that transfers hulls to the hull hopper.

(p) One (1) hull handling operation, approved in 1996 for construction, with a nominal throughput rate of 15 tons per hour, controlled by baghouse C7A, and exhausting to Stack 7A. This operation is consisting of the following:

(1) One (1) hull hopper that feeds to the pellet mills.

(2) Two (2) hull pellet mills, identified as P7A, approved in 1996 for construction, and P7B, approved in 2008 for construction. Only one (1) pellet mill is capable of operating at any given time.

(q) One (1) hull pellet cooler, identified as P8, approved in 1996 for construction, with a nominal capacity of 15 tons per hour, controlled by cyclone C8, and exhausting to Stack 8.

(r) Pellet storage operation consisting of the following:

(1) Pellet storage bin, identified as P8A, approved in 1996 for construction, with a nominal capacity of 29,000 cubic feet, controlled by baghouse C8A that exhausts to Stack 8A.

(2) Pellet storage building, identified as P8B, approved in 1996 for construction, with a nominal capacity of 70,000 cubic feet, controlled by baghouse C8B that exhausts to Stack 8B.

(3) Only one pellet storage can receive product at any one time.

(s) One (1) soybean flaking operation, identified as P19, approved in 1996 for construction and approved in 2009 and in 2010 for modification, with a nominal throughput rate of 104.9 tons per hour, and consisting of the following:

(1) One (1) totally enclosed drag conveyor (or equivalent) and one (1) totally enclosed overflow recycle L-Path conveyor (or equivalent) with a totally enclosed surge hopper that transfers beans from cracking and dehulling to the flakers.

(2) Ten (10) flakers, controlled by baghouses C19A, C19B, and C19C, exhausting to Stack 19, and/or controlled by baghouse C19D, exhausting to Stack P19D.

(3) Two (2) totally enclosed drag conveyors (or equivalent) in series that transfer soybean flakes and collets from the flakers and the expander system to the feed screw conveyor.

(4) One (1) feed screw conveyor that transfers soybean flakes and collets to the extractor.

Under NESHAP, Subpart GGGG, these units are considered vegetable oil production processes.

(t) One (1) soybean oil extraction system, identified as P13, approved in 1996 for construction, controlled by mineral oil absorber system C13, and exhausting to Stack 13. This system consists of the following:

(1) One (1) soybean oil extractor, with a nominal capacity of 104.9 tons of soybean flakes and collets per hour and 104.9 tons of hexane per hour.

(2) One (1) desolventizer unit, with a nominal capacity of 86.8 tons of spent soybean flakes and collets per hour.

(3) A set of evaporators, with a nominal capacity of 20.7 tons of soybean oil per hour.

(4) A set of condensers and water separator to separate hexane and water, with a nominal capacity of 20.7 tons of soybean oil per hour.

(5) One (1) totally enclosed drag conveyor (or equivalent) that transfers flakes and hexane to the desolventizer at a nominal rate of 86.8 tons per hour and 34.5 tons per hour, respectively.

Under NESHAP, Subpart GGGG, these units are considered vegetable oil production processes.

(u) One (1) DTDC meal dryer section 1, identified as P10, approved in 1996 for construction, with a nominal drying capacity of 83.4 tons of meal per hour, controlled by cyclone C10, and exhausting to Stack 10. Under NESHAP, Subpart GGGG, this unit is considered a vegetable oil production process.

(v) One (1) DTDC meal dryer section 2, identified as P11, approved in 1996 for construction, with a nominal drying capacity of 83.4 tons of meal per hour, controlled by cyclone C11, and exhausting to Stack 11. Under NESHAP, Subpart GGGG, this unit is considered a vegetable oil production process.

(w) One (1) DTDC meal dryer section 3, identified as P12, approved in 2009 for modification, with a nominal capacity of 83.4 tons of meal per hour, controlled by cyclone C12, and exhausting to Stack 12.

(x) One (1) enclosed conveyor transferring meal from the meal dryer section 3 to the meal cooling operation, approved in 2009 for construction.

(y) One (1) meal cooling operation, identified as P12A, approved in 2009 for construction, with a nominal capacity of 83.4 tons of meal per hour, controlled by cyclone C12A, and exhausting to Stack 12A. This operation consists of the following:

(1) Two (2) meal cooler sections, exhausting to the common cyclone C12A and Stack 12A.

(2) One (1) Meal Cooler enclosed drag conveyor (or equivalent) that transfers meal from the Meal Cooler and the C12A Cyclone to the one (1) DTDC enclosed drag conveyor.

(3) One (1) DTDC enclosed drag conveyor (or equivalent) that transfers meal from the Meal Cooler/DTDC and four (4) DTDC cyclones (C10, C11, C12, C12A) to the meal surge bin conveyor.

Under NESHAP, Subpart GGGG, these units are considered vegetable oil production processes.

(z) One (1) meal handling process, identified as P9, approved in 1996 for construction, with a nominal capacity of 83.4 tons of meal per hour, controlled by baghouse C9, and exhausting to Stack 9. This process consists of the following:

(1) One (1) totally enclosed conveyor that transfers the meal to the surge bin or the Screener Feed Drag.

(2) One (1) meal surge bin, with a nominal storage capacity of 19,000 cubic feet, that feeds to the recycle leg.

(3) One (1) elevator leg that transfers the meal to the sizing process.

(4) One (1) Screener Feed Drag totally enclosed drag conveyor that feeds the meal screeners.

(5) Four (4) meal screeners.

(6) One (1) meal screening hopper.

(7) Two (2) meal grinders.

(8) Two (2) meal grinding hoppers.

(9) One (1) totally enclosed drag conveyor (or equivalent) that transfers meal from the grinding hoppers to the meal mixing screw conveyor.

(10) One (1) enclosed meal mixing screw conveyor (or equivalent) that transfers meal to the mixed meal elevator leg.

(11) One (1) mixed meal elevator leg.

(12) One (1) totally enclosed drag conveyor (or equivalent) that transfers meal from the mixed meal elevator leg to the meal storage tanks, load out bins and bulk weigh system.

(aa) One (1) meal storage operation, identified as P20, approved in 1996 for construction, with a nominal throughput rate of 300 tons of meal per hour, controlled by baghouse C20, and exhausting to Stack 20. This operation consists of the following:

(1) Meal storage tanks (capacity 292,000 cubic feet) and loadout bin (capacity 29,000 cubic feet), with a combined nominal storage capacity of 321,000 cubic feet.

(2) One (1) totally enclosed drag conveyor (or equivalent) that transfers soybean meal from the meal storage tanks to the meal elevator leg.

(3) One (1) meal elevator leg that operates at a nominal capacity of 300 tons per hour.

(bb) One (1) truck meal loadout operation, identified as P14, approved in 1996 for construction, with a nominal throughput rate of 383.3 tons of meal per hour, controlled by baghouse C14, and exhausting to Stack 14. This operation consists of the following:

(1) Three (3) totally enclosed drag conveyors (or equivalent) that transfer meal from the meal loadout bins to the truck.

(2) Two (2) truck loadout chutes, with only one chute having flow at any given time.

(cc) One (1) barge/railcar meal loadout operation, identified as P15, approved in 1996 for construction, with a nominal throughput rate of 383.3 tons of meal per hour, controlled by baghouse C15, and exhausting to Stack 15. This operation consists of the following:

(1) One (1) rail and barge loadout scalper with a totally enclosed ball breaker.

(2) One (1) rail and barge bulk weigh system consisting of one (1) upper garner, one (1) weigh hopper, and one (1) lower surge.

(3) One (1) totally enclosed drag conveyor (or equivalent) that transfers meal from the lower surge to rail or barge.

(4) Two (2) rail loadout systems, with only one system operating at a time.

(5) One (1) enclosed conveyor that transfers soybean meal from the lower surge to the barge loadout system.

(6) One (1) barge loadout system.

(dd) Three (3) fixed roof hexane storage tanks.

(1) Two (2) fixed roof hexane storage tanks, approved in 1996 for construction, each with a nominal storage capacity of 14,000 gallons.

(2) One (1) horizontal fixed roof hexane storage tank, approved in 2012 for construction, with a nominal storage capacity of 28,000 gallons.

All hexane tanks are vented to the distillation system and exhausted through to Stack 13 (P13). Under NESHAP, Subpart GGGG, these tanks are considered vegetable oil production processes.

(ee) One (1) fixed roof hexane work tank, approved in 1996 for construction, with a nominal storage capacity of 8,000 gallons. Under NESHAP, Subpart GGGG, this tank is considered a vegetable oil production process.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(14)]

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

(a) Degreasing operations that do not exceed 145 gallons per twelve (12) months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]

(b) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

(c) Emergency generators as follows: one (1) natural gas-fired emergency generator, approved in 1997 for construction, with a maximum generating rate of 343 kilowatts. [40 CFR 63, Subpart ZZZZ]

(d) Stationary fire pump engines as follows: two (2) diesel-fired pumps, one (1) approved in 1997 for construction and one (1) approved in 2012 for construction, each with a nominal power output rate of 305 hp. [40 CFR 60, Subpart IIII] [40 CFR 63, Subpart ZZZZ]

A.4 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)] [IC 13-15-3-6(a)]

(a) This permit, T129-31079-00035, 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] [IC 13-17-12]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

(a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

(1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(35), and

(2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) A "responsible official" is defined at 326 IAC 2-7-1(35).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 of each year to:

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

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)] [326 IAC 1-6-3]

(a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

(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.

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, or Southwest Regional Office or Southeast Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865
Southwest Regional Office phone: (812) 380-2305; fax: (812) 380-2304.
Southeast Regional Office phone: (812) 358-2027; fax: (812) 358-2058.

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

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

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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)(8) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

B.12 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5] [326 IAC 2-7-10.5]

(a) All terms and conditions of permits established prior to T129-31079-00035 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.14 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source’s existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4] [326 IAC 2-7-8(e)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

Request for renewal shall be submitted to:

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

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)]

(a) No Part 70 permit revision or notice shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.19 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b) or (c) without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

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

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b) or (c). 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) and (c)(1).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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.20 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.21 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-30-3-1] [IC 13-17-3-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)] [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.24 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 5-1-1 (Applicability) and 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of 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.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

C.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 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

The Permittee shall comply with the applicable requirements of 326 IAC 14-10, 326 IAC 18, and 40 CFR 61.140.

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

C.8 Performance Testing [326 IAC 3-6]

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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.9 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.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)] [40 CFR 64] [326 IAC 3-8]

(a) Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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.

(b) For monitoring required by CAM, at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(c) For monitoring required by CAM, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

C.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.12 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 shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

(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.13 Risk Management Plan [326 IAC 2-7-5(11)] [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.14 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6] [40 CFR 64] [326 IAC 3-8]

(I) Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to normal or usual manner of operation.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall record the reasonable response steps taken.

(II)

(a) CAM *Response to excursions or exceedances.*

(1) Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit (including the 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. 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). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or 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.

(2) 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, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(b) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

(c) Based on the results of a determination made under paragraph (II)(a)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a QIP. The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.

(d) Elements of a QIP:
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).

(e) If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

(f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(a)(2) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:

(1) Failed to address the cause of the control device performance problems; or

(2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(g) Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or record keeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

(h) *CAM record keeping requirements.*

(1) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(a)(2) of this condition and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

(2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable record keeping requirements.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

C.16 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]

Pursuant to 326 IAC 2-6-3(b)(3), starting in 2006 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(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. Support information includes the following:

(AA) All calibration and maintenance records.

(BB) All original strip chart recordings for continuous monitoring instrumentation.

(CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following:

(AA) The date, place, as defined in this permit, and time of sampling or measurements.

(BB) The dates analyses were performed.

(CC) The company or entity that performed the analyses.

(DD) The analytical techniques or methods used.

(EE) The results of such analyses.

(FF) The operating conditions as existing at the time of sampling or measurement.

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, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [40 CFR 64] [326 IAC 3-8]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B – Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C – General Reporting. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

On and after the date by which the Permittee must use monitoring that meets the requirements of 40 CFR Part 64 and 326 IAC 3-8, the Permittee shall submit CAM reports to the IDEM, OAQ.

A report for monitoring under 40 CFR Part 64 and 326 IAC 3-8 shall include, at a minimum, the information required under paragraph (a) of this condition and the following information, as applicable:

(1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

(2) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

(3) A description of the actions taken to implement a QIP during the reporting period as specified in Section C-Response to Excursions or Exceedances. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

The Permittee may combine the Quarterly Deviation and Compliance Monitoring Report and a report pursuant to 40 CFR 64 and 326 IAC 3-8.

(b) The address for report submittal is:

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

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with applicable standards for recycling and emissions reduction.

SECTION D.1 FACILITY OPERATION CONDITIONS - Boilers

Facility Description [326 IAC 2-7-5(14)]

(a) Three (3) 33.7 MMBtu per hour natural gas fired boilers, identified as P17, P18, and P18A, approved in 1996 for construction, and exhausting to Stacks 17, 18, and 18A, respectively.

(b) Two (2) wood/shredded tire fired boilers, identified as P17B and P17C, approved in 2006 for construction, each with a nominal heat input capacity of 57.3 MMBtu/hr, both controlled by one (1) electrostatic precipitator (ESP) (identified as ES1), and exhausting through Stack 17A. Stack 17A is equipped with a continuous opacity monitoring system (COMS).

(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 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), particulate emissions from the natural gas fired-boilers (P17, P18, and P18A) shall be limited to 0.328 pounds per million BTU heat input each.

D.1.2 PSD Minor Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

(a) The total emissions from boilers P17B and P17C (Stack 17A) shall not exceed the emission limits listed in the table below:

Pollutants	Emission Limit (lb/MMBtu)
CO	0.2
NO_x	0.44
PM	0.025
PM_{10}	0.042
$PM_{2.5}$	0.035
SO_2	0.115
VOC	0.017

(b) The total equivalent dry wood input to boilers P17B, P17C, P17, P18, and P18A shall not exceed 51,875 tons per twelve consecutive month period with compliance determined at the end of each month.

(1) Dry wood is defined as wood with a moisture content less than 5% by weight.

(2) The use of one ton of shredded tire is equivalent to the use of 2.0 tons of equivalent dry wood.

(3) The use of 1 MMCF of natural gas in boilers P17, P18, or P18A is equivalent to the use of 37.8 tons of equivalent dry wood.

Therefore, the total equivalent dry wood usage shall be calculated using the following equation:

Total Equivalent Dry Wood Usage (tons) = Dry Wood Usage (tons) + [Wet Wood Usage (tons)/ (1+Moisture Content of Wet Wood)] + 2.0 x Shredded Tire (tons) + 37.8 x NG Usage (MMCF)

(c) The total shredded tire input to boilers P17B and P17C shall not exceed 7,410 tons per twelve consecutive month period with compliance determined at the end of each month.

(d) The heating value of the dry wood combusted in boilers P17B or P17C shall not exceed 16 MMBtu/ton.

(e) The heating value of the shredded tire combusted in boilers P17B or P17C shall not exceed 32 MMBtu/ton.

(f) The wood combusted in boilers P17B and P17C shall be limited to fresh cut wood, painted/unpainted/untreated kiln dried wood scraps, or pallets.

(g) The tires combusted in boilers P17B and P17C shall be limited to shredded tires.

Compliance with these limits, in combination with the limits in Conditions D.2.1, D.3.1, and D.4.1 and the potential to emit from other units at the source, shall limit the potential to emit NO_X, VOC, PM, PM_{10}, and $PM_{2.5}$ from the entire source to less than 250 tons per twelve (12) consecutive month period, each. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

Compliance with these limits, combined with the potential to emit greenhouse gases from all other emission units at this source, shall limit the source-wide total potential to emit greenhouse gases (GHGs) to less than 100,000 tons of CO_2 equivalent emissions (CO_2e) per 12 consecutive month period and shall render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.1.4 Particulate Control

In order to ensure compliance with Condition D.1.2, the ESP for particulate control shall be in operation and control emissions from boilers P17B and P17C at all times that these boilers are in operation.

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Condition D.1.2, the Permittee shall perform PM, PM_{10}, $PM_{2.5}$, SO_2, NO_x, VOC, and CO testing for the emissions from Stack 17A (boilers 17B and 17C), utilizing methods as approved by the Commissioner, at least once every five (5) years from the date of the most recent valid compliance demonstration. The performance testing for each pollutant shall be performed at the worst case combustion scenario for each pollutant. PM_{10} and $PM_{2.5}$ include filterable and condensable PM.

(b) If boilers P17B and P17C have been shutdown for 90 days or more before the five (5) year date of the most recent valid compliance demonstration, the Permittee shall perform PM, PM_{10}, $PM_{2.5}$, SO_2, NO_x, VOC, and CO testing for the emissions not later than one hundred eighty (180) days after start-up, utilizing methods as approved by the Commissioner. The performance testing for each pollutant shall be performed at the worst case combustion scenario for each pollutant. PM_{10} and $PM_{2.5}$ includes filterable and condensable PM.

(c) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C- Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

(d) In order to demonstrate compliance with Condition D.1.2(b)(1), the Permittee shall perform analytical testing once every two (2) weeks to determine the moisture content of the wood received.

D.1.6 Continuous Emissions Monitoring [326 IAC 3-5]

(a) Pursuant to 326 IAC 3-5, and in order to ensure compliance with Condition D.1.2 and the requirements of 40 CFR 60, Subpart Dc as specified in Section E.1, continuous emission monitoring systems (CEMS) for boilers P17B and P17C shall be installed, calibrated, maintained, operated, and certified for measuring opacity which meet all applicable performance specifications of 326 IAC 3-5-2.

(b) All continuous emission monitoring systems are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.

(c) 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.

(d) 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 and 40 CFR Part 60.

D.1.7 Continuous Opacity Monitoring [326 IAC 3-5]

Whenever a COMS is malfunctioning or is down for maintenance or repairs for a period of twenty-four (24) hours or more and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMS, the Permittee shall provide a certified opacity reader, who may be an employee of the Permittee or an independent contractor, to self-monitor the emissions from the emission unit stack.

(a) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6)-minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.

(b) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6)-minute averaging periods at least twice per day during daylight operations, with at least four (4) hours between each set of readings, until a COMS is online.

(c) Method 9 readings may be discontinued once a COMS is online.

(d) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.

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

D.1.8 Transformer-Rectifier (T-R) Sets [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

(a) The ability of the ESP to control particulate emissions shall be monitored once per day, when the unit is in operation, by measuring and recording the number of T-R sets in service and the primary and secondary voltages and the currents of the T-R sets.

(b) Reasonable response steps shall be taken whenever the percentage of T-R sets in service falls below ninety percent (90%). Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. T-R set failure resulting in less than ninety percent (90%) availability is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.1.9 Wood Inspections

In order to demonstrate compliance with Condition D.1.2(f), the Permittee shall perform visual inspection of the wood received at this source for combustion. Inspections required by this condition shall be performed when performing the moisture content testing for the wood received.

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

D.1.10 Record Keeping Requirements

(a) To document the compliance status with Section C - Opacity, and the particulate matter and opacity requirements in Conditions D.1.2, D.1.6, D.1.7, and D.1.8, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits in Condition D.1.2.

(1) Data and results from the most recent stack test.

(2) All continuous opacity monitoring data, pursuant to 326 IAC 3-5-6.

(3) The results of all Method 9 visible emission readings taken during any periods of COMS downtime.

(4) All ESP parametric monitoring readings.

(b) To document the compliance status with Condition D.1.2, the Permittee shall maintain monthly records of the following:

(1) The amount of the wood combusted each month in boilers P17B and P17C.

(2) The type (fresh cut wood, painted/unpainted/untreated kiln dried wood scraps, or pallets) and the moisture contents of the wood combusted in boilers P17B and P17C.

(3) The amount of shredded tire combusted in boilers P17B and P17C.

(4) The total natural gas usage in boilers P17, P18, and P18A.

(5) The amount of equivalent dry wood usage for each month using the equation in Condition D.1.2(b).

(c) To document the compliance status with Condition D.1.2(f), the Permittee shall maintain a copy of the contract which indicates that the wood supplier cannot deliver any type of wood which is not specified in Condition D.1.2(f).

(d) To document the compliance status with Condition D.1.9, the Permittee shall maintain records of the results of the inspections required under Condition D.1.9.

(e) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required to be maintained by this condition.

D.1.11 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.1.2(b) and D.1.2(c) shall be submitted no later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(35).

SECTION D.2 FACILITY OPERATION CONDITIONS - Grain Receiving and HandlingGrain Receiving and Handling

Facility Description [326 IAC 2-7-5(14)]:

(c) One (1) north truck receiving area, identified as P24, approved in 2001 for construction, with a nominal throughput capacity of 360 tons per hour, controlled by baghouse C24, and exhausting to Stack 24. Under NSPS, Subpart DD, this unit is considered a truck unloading station.

(d) One (1) north house bin loading area, identified as P27, approved in 2001 for construction, with a nominal throughput capacity of 360 tons per hour, and exhausting inside the north house, consisting of the following:

(1) One (1) totally enclosed aspirated elevator leg that transfers soybeans to enclosed conveyors.

(2) Two (2) enclosed conveyors that transfer the soybean from the north receiving area to the soybean storage areas.

(f) One (1) truck only soybean receiving area, identified as P1, approved in 1996 for construction, with a nominal throughput capacity of 600 tons per hour. This area consists of the following:

(1) One (1) truck only receiving pit.

(2) One (1) totally enclosed belt conveyor system (or equivalent), using an oil application to control PM emissions.

(3) One (1) aspirated soybean receiving leg, controlled by an oil application to control PM emissions and also controlled by baghouse C1, exhausting to Stack 1.

(4) One (1) enclosed belt conveyor that transfers the soybean from the receiving leg to the soybean enclosed belt conveyor.

(5) One (1) enclosed belt conveyor that loads the soybean storage silos.

(g) One (1) truck and railcar soybean receiving area, identified as P2, approved in 1996 for construction, with a nominal throughput capacity of 540 tons per hour, consisting of the following:

(1) One (1) truck and railcar receiving pit, with PM emissions controlled by restricting vehicles unloading grain at these stations to hopper-bottom rail cars and trucks with choke unloading applications.

(2) One (1) enclosed drag conveyor system (or equivalent), using an oil application to control PM emissions.

(3) Two (2) aspirated soybean receiving legs, using an oil application to control PM emissions and also controlled by baghouse C1, exhausting to Stack 1.

(4) One (1) aspirated bulkweigher, using and oil application to control PM emissions and also controlled by baghouse C1, exhausting to Stack 1.

(5) One (1) enclosed drag conveyor that transfers the soybean at a nominal rate of 540 tons per hour from the receiving leg to the soybean covered belt conveyor that loads the soybean silos.

(h) One (1) annex silo loading operation, identified as P2A, approved in 1996 for construction, with a

Facility Description [326 IAC 2-7-5(14)]:

nominal throughput rate of 1,740 tons per hour, controlled by an oil application system, and consisting of the following:

(1) Twelve (12) concrete soybean silos, each with a nominal storage capacity of 73,053 bushels.

(2) Four (4) concrete soybean storage silos, each with a nominal capacity of 19,375 bushels.

(3) Two (2) concrete soybean storage silos, each with a nominal capacity of 18,801 bushels.

(4) Three (3) totally enclosed drag conveyors (or equivalent) comprising two conveyance systems located below the storage silos that transfer the soybeans from the silos to the elevator legs.

(i) One (1) soybean storage system, identified as P2B, approved in 2002 for construction and approved in 2009 for modification, with a nominal throughput of 600 tons per hour, controlled by an oil application system, and consisting of the following:

(1) Two (2) soybean silos (P2B and P2C), with a nominal combined storage capacity of 1,177,000 bushels.

(2) Two (2) enclosed belt conveyors.

(3) Two (2) enclosed drag conveyors.

(k) One (1) soybean cleaning system, identified as P4, approved in 1996 for construction, with a nominal throughput rate of 115 tons per hour, controlled by baghouse C4, and exhausting to stack C4. This system consists of the following:

(1) Two (2) soybean elevator legs that transfer the soybeans from the drag conveyor to the cleaner, using an oil application to control PM emissions.

(2) One (1) totally enclosed conveyor that transfers the soybeans from the elevator legs to the magnet.

(3) One (1) magnet, using both an oil application and baghouse C4 to control PM emissions.

(4) One (1) cleaning system, consisting of the following:

(A) Two (2) cleaners, controlled by an oil application system and baghouse C4.

(B) Two (2) aspirators, controlled by an oil application system and baghouse C4.

(C) One (1) conveyor transferring beans from the aspirator to the hopper, controlled by an oil application system and baghouse C4.

(D) One (1) hopper, controlled by an oil application system and baghouse C4.

(E) One (1) scale, controlled by an oil application system and baghouse C4.

(F) One (1) aspirator, controlled by cyclone C5E, and exhausting to stack 5.

(G) One (1) breaker, controlled by cyclone C5E, and exhausting to stack 5.

Facility Description [326 IAC 2-7-5(14)]:

(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 PSD Minor Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

(a) The PM, PM_{10}, and $PM_{2.5}$ emissions from the following emission units shall be limited as follows:

Unit ID	Unit Description	Control Device	PM Emission Limit (lbs/hr)	PM_{10} Emission Limit (lbs/hr)	$PM_{2.5}$ Emission Limit (lbs/hr)
P24	North Truck Receiving	Baghouse C24	0.43	0.43	0.43
P4	Soybean Cleaning	Baghouse C4	0.81	0.81	0.81
P1	Truck Soybean Receiving	Baghouse C1	0.56	0.56	0.56

(b) The total grain received at P1 and P2 combined shall not exceed 1,020,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(c) The total grain received at the north house bin loading area, identified as P27, shall not exceed 108,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(d) The PM, PM_{10}, and $PM_{2.5}$ emissions from the following emission units shall be limited as follows:

Unit ID	Unit Description	Control Device	PM Emission Limit (lbs/ton)	PM_{10} Emission Limit (lbs/ton)	$PM_{2.5}$ Emission Limit (lbs/ton)
P27	North House Bin Loading	None	0.061	0.034	0.0058
P2	Truck and Railcar Receiving	restricting vehicles unloading grain to hopper-bottom rail cars	0.035	0.0078	0.00013
P2A	Annex Silo Storage	oil application system	0.025	0.0063	0.0011
P2A	Annex Silo Loading	oil application system	0.061	0.034	0.0058
P2B	Soybean Storage	oil application system	0.025	0.0063	0.0011
P2B	Soybean Loading	oil application system	0.061	0.034	0.0058

Compliance with these limits, in combination with the limits in Conditions D.1.2, D.3.1, and D.4.1 and the potential to emit from other units at the source, shall limit the potential to emit PM, PM_{10}, and $PM_{2.5}$ from the entire source to less than 250 tons per twelve (12) consecutive month period, each. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.2.3 Particulate Control

(a) In order to ensure compliance with Condition D.2.1, each of the following emission units shall be controlled by the associated baghouse, as listed in the table below, when these units are in operation:

Unit ID	Unit Description	Baghouse ID
P24	North Truck Receiving	C24
P4	Soybean Cleaning	C4
P1	Truck Soybean Receiving	C1

(b) In order to ensure compliance with Conditions D.2.1(a) and D.2.1(d), dust control oil shall be applied on all soybeans handled by emission units identified as P1, P2, P2A, P2B, and P4.

(c) In order to ensure compliance with Conditions D.2.1(a) and D.2.1(d), vehicles unloading grain (Units P1 and P2) shall be restricted to grain to hopper-bottom rail cars or trucks with choke unloading applications.

(d) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.2.4 Visible Emissions Notations [40 CFR 64]

(a) Pursuant to 40 CFR 64 (CAM), visible emission notations of the exhausts from the baghouse stacks (Stacks 24 and 4) shall be performed daily 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 noncontinuous 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 a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.2.5 Parametric Monitoring [40 CFR 64]

Pursuant to 40 CFR 64 (CAM), the Permittee shall record the pressure drop across the baghouses used in conjunction with the north truck receiving (P24), the truck receiving (P1), and the soybean cleaning (P4) operations, at least once per day when the any of these operations is in operation. When, for any one reading, the pressure drop across the baghouse is outside of the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 7.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The 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 or replaced at least once every six (6) months.

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

D.2.7 Record Keeping Requirements

(a) To document the compliance status with Condition D.2.1(b), the Permittee shall maintain monthly records of the total amount of the grain received.

(b) To document the compliance status with Condition D.2.1(c), the Permittee shall maintain monthly records of the total amount of the grain received at the north house bin loading area, identified as P27.

(c) To document the compliance status with Condition D.2.4, the Permittee shall maintain records of the daily visible emission notations. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(d) To document the compliance status with Condition D.2.5, the Permittee shall maintain once per day records of the pressure drop during normal operation for baghouses. 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).

(e) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required to be maintained by this condition.

D.2.8 Reporting Requirements

(a) A quarterly summary of the information to document the compliance status with Condition D.2.1(b) shall be submitted not later than thirty (30) days after the end of each calendar quarter.

(b) A quarterly summary of the information to document the compliance status with Condition D.2.1(c) shall be submitted not later than thirty (30) days after the end of each calendar quarter.

(c) The reports submitted by the Permittee do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(35). Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reports required by this condition.

SECTION D.3 FACILITY OPERATION CONDITIONS - Oil Extraction Processes Oil Extraction Processes

Facility Description [326 IAC 2-7-5(14)]:

(e) One (1) soybean expander system, approved in 1996 for construction and approved in 2004 for modification, with a nominal capacity of 50 tons per hour. This system consists of the following:

(1) One (1) expander, forming soybean collets.

(2) One (1) totally enclosed conveying system transferring material from the expander system to the extraction system.

(l) One (1) soybean heater with one (1) L-Path totally enclosed drag conveyor, identified as P21, approved in 1996 for construction and approved in 2008 for replacement, with a nominal capacity of 115 tons per hour, and exhausting to Stack 21. Under NESHAP, Subpart GGGG, the soybean heater is considered vegetable oil production processes.

(m) One (1) soybean cracking and dehulling operation, identified as P5, approved in 1996 for construction, with a nominal throughput rate of 115 tons per hour, and consisting of the following:

(1) One (1) enclosed drag conveyor (or equivalent) and one (1) totally enclosed overflow recycle L-Path conveyor (or equivalent) with a totally enclosed surge hopper that transfers soybeans to the jet dryers.

(2) Three (3) jet dryers, each with a nominal capacity of 42 tons per hour, controlled by cyclones C5A, C5B, and C5F, respectively, and exhausting to Stack 5.

(3) Three (3) primary CCD dryers, controlled by cyclones C5C and C5G, and exhausting to Stack 5.

(4) Three (3) secondary CCC coolers, controlled by cyclones C5D and C5H, and exhausting to Stack 5.

(5) Six (6) cracking and dehulling rolls that transfer the hulls through four (4) cyclones (C5C, C5D, C5G, and C5H) to an enclosed conveyor.

(6) One (1) totally enclosed cracking and dehulling drag conveyor (or equivalent) that transfers hulls from cyclones C5A and C5B to the hull grinding system, with a nominal throughput rate of 8.05 tons per hour.

(7) One (1) totally enclosed cracking and dehulling drag conveyor (or equivalent) that transfers hulls and aspirated fines from cyclones C5C, C5D, C5F, C5G, C5H, and the totally enclosed auger (or equivalent) of filter C4 to the hull screener and aspirator, with a nominal throughput rate of 8.05 tons per hour.

(8) One (1) hull screener and aspirator, with a nominal throughput rate of 8.05 tons per hour, controlled by cyclone C5E, and exhausting to Stack 5.

(s) One (1) soybean flaking operation, identified as P19, approved in 1996 for construction and approved in 2009 and in 2010 for modification, with a nominal throughput rate of 104.9 tons per hour, and consisting of the following:

(1) One (1) totally enclosed drag conveyor (or equivalent) and one (1) totally enclosed overflow recycle L-Path conveyor (or equivalent) with a totally enclosed surge hopper that transfers beans from cracking and dehulling to the flakers.

Facility Description [326 IAC 2-7-5(14)]:

(2) Ten (10) flakers, controlled by baghouses C19A, C19B, and C19C, exhausting to Stack 19, and/or controlled by baghouse C19D, exhausting to Stack P19D.

(3) Two (2) totally enclosed drag conveyors (or equivalent) in series that transfer soybean flakes and collets from the flakers and the expander system to the feed screw conveyor.

(4) One (1) feed screw conveyor that transfers soybean flakes and collets to the extractor.

(t) One (1) soybean oil extraction system, identified as P13, approved in 1996 for construction, controlled by mineral oil absorber system C13, and exhausting to Stack 13. This system consists of the following:

(1) One (1) soybean oil extractor, with a nominal capacity of 104.9 tons of soybean flakes and collets per hour and 104.9 tons of hexane per hour.

(2) One (1) desolventizer unit, with a nominal capacity of 86.8 tons of spent soybean flakes and collets per hour.

(3) A set of evaporators, with a nominal capacity of 20.7 tons of soybean oil per hour.

(4) A set of condensers and water separator to separate hexane and water, with a nominal capacity of 20.7 tons of soybean oil per hour.

(5) One (1) totally enclosed drag conveyor (or equivalent) that transfers flakes and hexane to the desolventizer at a nominal rate of 86.8 tons per hour and 34.5 tons per hour, respectively.

(u) One (1) DTDC meal dryer section 1, identified as P10, approved in 1996 for construction, with a nominal drying capacity of 83.4 tons of meal per hour, controlled by cyclone C10, and exhausting to Stack 10.

(v) One (1) DTDC meal dryer section 2, identified as P11, approved in 1996 for construction, with a nominal drying capacity of 83.4 tons of meal per hour, controlled by cyclone C11, and exhausting to Stack 11.

(w) One (1) DTDC meal dryer section 3, identified as P12, approved in 2009 for modification, with a nominal capacity of 83.4 tons of meal per hour, controlled by cyclone C12, and exhausting to Stack 12.

(x) One (1) enclosed conveyor transferring meal from the meal dryer section 3 to the meal cooling operation, approved in 2009 for construction.

(y) One (1) meal cooling operation, identified as P12A, approved in 2009 for construction, with a nominal capacity of 83.4 tons of meal per hour, controlled by cyclone C12A, and exhausting to Stack 12A. This operation consists of the following:

(1) Two (2) meal cooler sections, exhausting to the common cyclone C12A and Stack 12A.

(2) One (1) Meal Cooler enclosed drag conveyor (or equivalent) that transfers meal from the Meal Cooler and the C12A Cyclone to the one (1) DTDC enclosed drag conveyor.

(3) One (1) DTDC enclosed drag conveyor (or equivalent) that transfers meal from the Meal Cooler/DTDC and four (4) DTDC cyclones (C10, C11, C12, C12A) to the meal surge bin conveyor.

Facility Description [326 IAC 2-7-5(14)]:

(dd) Three (3) fixed roof hexane storage tanks.

(1) Two (2) fixed roof hexane storage tanks, approved in 1996 for construction, each with a nominal storage capacity of 14,000 gallons.

(2) One (1) horizontal fixed roof hexane storage tank, approved in 2012 for construction, with a nominal storage capacity of 28,000 gallons.

All hexane tanks are vented to the distillation system and exhausted through to Stack 13 (P13). Under NESHAP, Subpart GGGG, these tanks are considered vegetable oil production processes.

(ee) One (1) fixed roof hexane work tank, approved in 1996 for construction, with a nominal storage capacity of 8,000 gallons. Under NESHAP, Subpart GGGG, this tank is considered a vegetable oil production process.

(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 PSD Minor Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

(a) The PM, PM_{10}, and $PM_{2.5}$ emissions from the following emission unit shall be limited as follows:

Unit ID	Unit Description	Control Device	PM Emission Limit (lbs/hr)	PM_{10} Emission Limit (lbs/hr)	$PM_{2.5}$ Emission Limit (lbs/hr)
P5	Soybean Cracking/Dehulling	Cyclones C5A-H	21.94	21.94	21.94
P19	Soybean Flaking	Baghouses C19A-C	0.39	0.39	0.39
		Baghouse C19D	0.72	0.72	0.72
P10	DTDC Meal Dryer #1	Cyclone C10	5.39	5.39	5.39
P11	DTDC Meal Dryer #2	Cyclone C11	0.13	0.13	0.13
P12	DTDC Meal Dryer #3	Cyclone C12	0.10	0.10	0.10
P12A	DTDC Meal Cooler	Cyclone C12A	0.22	0.22	0.22

(b) The total grain processed at this source shall not exceed 940,240 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(c) The PM emissions from the soybean heater (P21) shall not exceed 0.001 pounds per ton of grain processed.

(d) The PM_{10} emissions from the soybean heater (P21) shall not exceed 0.001 pounds per ton of grain processed.

(e) The $PM_{2.5}$ emissions from the soybean heater (P21) shall not exceed 0.001 pounds per ton of grain processed.

Compliance with these limits, in combination with the limits in Conditions D.1.2, D.2.1, and D.4.1 and the potential to emit from other units at the source, shall limit the potential to emit PM, PM_{10}, and $PM_{2.5}$ from the entire source to less than 250 tons per twelve (12) consecutive month period, each. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

D.3.2 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of following operations shall not exceed the pound per hour limits listed in the table below:

Unit ID	Unit Description	Max. Throughput Rate (tons/hr)	Particulate Emission Limit (lbs/hr)
P21	Soybean Heater	115	52.7
P5	Soybean Cracking/Dehulling	115	52.7
P19	Soybean Flaking	104.9	51.8
P10	DTDC Meal Dryer #1	83.4	49.5
P11	DTDC Meal Dryer #2	83.4	49.5
P12	DTDC Meal Dryer #3	83.4	49.5
P12A	DTDC Meal Cooler	83.4	49.5

The pounds per hour limitations were calculated using 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.3.3 VOC Emissions [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (BACT), CP#129-7488-00035 (original BACT), issued on July 17, 1995, and SSM No. 129-27572-00035 (Revised BACT), issued on August 11, 2009, the Permittee shall control the VOC emissions from the soybean oil extraction system (P13), the DTDC dryers (P10, P11 and P12), and the DTDC cooler (P12A) with a Best Available Control Technology (BACT), which have been determined to be the following:

(a) The Permittee shall comply with the following for the soybean oil extraction system (P13):

(1) The hexane usage shall be limited to 0.225 gallons per ton of soybean crushed.

(2) The extraction and distillation process shall be controlled by a mineral oil absorber system.

(3) The VOC emissions from the soybean oil extraction system (P13) shall not exceed 0.084 pounds per ton of soybean processed.

(b) The VOC emissions from the DTDC dryers (P10, P11 and P12) shall not exceed 0.16 pounds per ton of soybean processed total.

(c) The VOC emissions from the DTDC cooler (P12A) shall not exceed 0.16 pounds per ton of soybean processed.

D.3.4 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.3.5 Particulate Control

(a) In order to ensure compliance with Conditions D.3.1 and D.3.2, each of the following emission units shall be controlled by the associated baghouse or cyclone, as listed in the table below, when these units are in operation:

Unit ID	Unit Description	Control Device
P5	Soybean Cracking/Dehulling	Cyclones C5A-H
P19	Soybean Flaking	Baghouses C19A-C
		or Baghouse C19D
P10	DTDC Meal Dryer #1	Cyclone C10
P11	DTDC Meal Dryer #2	Cyclone C11
P12	DTDC Meal Dryer #3	Cyclone C12
P12A	DTDC Meal Cooler	Cyclone 12A

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.3.6 VOC Control

In order to ensure compliance with Condition D.3.3(a), the soybean oil extraction system (P13) shall be controlled by the mineral oil absorber system (C13) when this system is in operation.

D.3.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Conditions D.3.1 and D.3.2, the Permittee shall perform PM, PM_{10}, and $PM_{2.5}$ testing for the soybean cracking and dehulling operation (P5) and Soybean Flaking (P19, stack P19D) utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. PM_{10} and $PM_{2.5}$ include filterable and condensible PM.

(b) In order to demonstrate compliance with Condition D.3.3, the Permittee shall perform VOC testing for the soybean oil extraction system (P13) and the DTDC meal dryers (P10 and P11) utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration.

(c) In order to demonstrate compliance with Condition D.3.3(b) and (c), the Permittee shall perform VOC testing for the DTDC meal dryer section 3 (P12) and the DTDC meal cooler (P12A) when P12 and P12A are in operation utilizing methods as approved by the Commissioner. Testing on P12 and P12A shall be repeated in conjunction with testing on P10 and P11 at least once every five (5) years from the date of the most recent valid compliance demonstration for P10 and P11.

(d) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C- Performance Testing contains the Permittee's obligations with regard to the performance testing required by this condition.

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

D.3.8 Visible Emissions Notations [40 CFR 64]

(a) Pursuant to 40 CFR 64 (CAM), visible emission notations of the exhausts from Stacks 5, 19, and P19D shall be performed daily during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) Visible emission notations of the exhausts from Stacks 10, 11, 12 and 12A shall be performed daily during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(c) 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.

(d) In the case of batch or noncontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(e) 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.

(f) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.3.9 Parametric Monitoring [40 CFR 64]

Pursuant to 40 CFR 64 (CAM), the Permittee shall record the pressure drop across the baghouses used in conjunction with the soybean flaking operation (P19) at least once per day when any of these operations is in operation. When, for any one reading, the pressure drop across the baghouse is outside of the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 6.0 and 12.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The 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 or replaced at least once every six (6) months.

D.3.10 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.

D.3.11 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.3.12 VOC Monitoring

The Permittee shall comply with the following for the mineral oil absorber system (C13), which is used to control the VOC emissions from the soybean extraction system (P13):

(a) The inlet vacuum pressure of the vapor stream to the absorber shall not exceed 10 inches of water and the flow rate of the mineral oil through the absorber shall not be less than 15 gallons per minute. When the process is in operation, an electronic data management system (EDMS) shall record the instantaneous inlet vacuum pressure and flow rate on a frequency of not less than every 15 minutes.

(b) The temperature of the mineral oil entering the absorber shall be kept in a range of 70 to 105 degrees Fahrenheit (°F). When the process is in operation, an electronic data management system (EDMS) shall record the instantaneous temperature on a frequency of not less than every 15 minutes.

(c) The temperature of the mineral oil entering the mineral-oil-stripping column shall not be less than 200 degrees Fahrenheit (°F) for adequate stripping of the absorbed hexane from the oil. When the process is in operation, an EDMS shall record the instantaneous temperature on a frequency of not less than every 15 minutes.

In the event that a breakdown of the EDMS occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameters should be implemented at intervals no less frequent than every 2 hours.

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

D.3.13 Record Keeping Requirements

(a) To document the compliance status with Conditions D.3.1(b), the Permittee shall maintain monthly records of the amount of soybean processed.

(b) To document the compliance status with Condition D.3.8, the Permittee shall maintain records of the daily visible emission notations. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(c) To document the compliance status with Condition D.3.9, the Permittee shall maintain once per day records of the pressure drop during normal operation for baghouses. 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).

(d) To document the compliance status with Condition D.3.12, the Permittee shall maintain the following records:

(1) Records of the days the lower meal temperature of the desolventizer is below 215 degrees F and meal laboratory VOC test results for those days.

(2) Electronic data management system (EDMS) records for the inlet vacuum pressure of the vapor stream to the absorber, flow rate of the mineral oil through the absorber, the mineral oil temperature entering the absorber and mineral oil temperature entering the stripping column. Records of the times and reasons of the breakdown of the EDMS and efforts made to correct the problem should accompany any supplemental or intermittent monitoring records occurring as a result of EDMS failure.

(e) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required to be maintained by this condition.

D.3.14 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.3.1(b) and D.3.3(a)(2) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(35).

SECTION D.4 FACILITY OPERATION CONDITIONS - Kaolin, Hull, and Meal Handling OperationsKaolin, Hull, and Meal Handling Operations

Facility Description [326 IAC 2-7-5(14)]:

(j) One (1) flow coating material kaolin handling operation, identified as P3, approved in 1996 for construction, controlled by baghouse C3, and exhausting to Stack 3. This operation consists of the following:

(1) One (1) flow coating material kaolin receiving bin.

(2) One (1) flow coating material enclosed conveyor system that transfers kaolin to the enclosed mixing screw conveyor, with a nominal throughput rate of 0.417 tons per hour.

(n) One (1) hull grinding operation, identified as P6, approved in 1996 for construction, with a nominal throughput rate of 8.05 tons per hour, controlled by baghouse C6, and exhausting to Stack 6. This operation is consisting of the following:

(1) Two (2) hull grinders.

(2) One (1) ground hulls cyclone.

(3) One (1) totally enclosed drag conveyor (or equivalent) that transfers hulls from the ground hulls cyclone to the hull hopper.

(o) One (1) hull storage operation, identified as P7, approved in 1996 for construction, with a nominal throughput rate of 15 tons per hour, controlled by baghouse C7, and exhausting to Stack 7. This operation is consisting of the following:

(1) One (1) ground hulls blower that transfers hulls to the Hull storage bins.

(2) Hull storage bins, with a nominal capacity of 39,000 cubic feet.

(3) Two (2) totally enclosed drag conveyor (or equivalent) that transfers hulls to the ground hulls blower.

(4) One (1) ground hulls blower that transfers hulls to the hull hopper.

(p) One (1) hull handling operation, approved in 1996 for construction, with a nominal throughput rate of 15 tons per hour, controlled by baghouse C7A, and exhausting to Stack 7A. This operation is consisting of the following:

(1) One (1) hull hopper that feeds to the pellet mills.

(2) Two (2) hull pellet mills, identified as P7A, approved in 1996 for construction, and P7B, approved in 2008 for construction. Only one (1) pellet mill is capable of operating at any given time.

(q) One (1) hull pellet cooler, identified as P8, approved in 1996 for construction, with a nominal capacity of 15 tons per hour, controlled by cyclone C8, and exhausting to Stack 8.

(r) Pellet storage operation consisting of the following:

(1) Pellet storage bin, identified as P8A, approved in 1996 for construction, with a nominal capacity of 29,000 cubic feet, controlled by baghouse C8A that exhausts to Stack 8A.

(2) Pellet storage building, identified as P8B, approved in 1996 for construction, with a

Facility Description [326 IAC 2-7-5(14)]:

nominal capacity of 70,000 cubic feet, controlled by baghouse C8B that exhausts to Stack 8B.

(3) Only one pellet storage can receive product at any one time.

(z) One (1) meal handling process, identified as P9, approved in 1996 for construction, with a nominal capacity of 83.4 tons of meal per hour, controlled by baghouse C9, and exhausting to Stack 9. This process consists of the following:

(1) One (1) totally enclosed conveyor that transfers the meal to the surge bin or the Screener Feed Drag.

(2) One (1) meal surge bin, with a nominal storage capacity of 19,000 cubic feet, that feeds to the recycle leg.

(3) One (1) elevator leg that transfers the meal to the sizing process.

(4) One (1) Screener Feed Drag totally enclosed drag conveyor that feeds the meal screeners.

(5) Four (4) meal screeners.

(6) One (1) meal screening hopper.

(7) Two (2) meal grinders.

(8) Two (2) meal grinding hoppers.

(9) One (1) totally enclosed drag conveyor (or equivalent) that transfers meal from the grinding hoppers to the meal mixing screw conveyor.

(10) One (1) enclosed meal mixing screw conveyor (or equivalent) that transfers meal to the mixed meal elevator leg.

(11) One (1) mixed meal elevator leg.

(12) One (1) totally enclosed drag conveyor (or equivalent) that transfers meal from the mixed meal elevator leg to the meal storage tanks, load out bins and bulk weigh system.

(aa) One (1) meal storage operation, identified as P20, approved in 1996 for construction, with a nominal throughput rate of 300 tons of meal per hour, controlled by baghouse C20, and exhausting to Stack 20. This operation consists of the following:

(1) Meal storage tanks (capacity 292,000 cubic feet) and loadout bin (capacity 29,000 cubic feet), with a combined nominal storage capacity of 321,000 cubic feet.

(2) One (1) totally enclosed drag conveyor (or equivalent) that transfers soybean meal from the meal storage tanks to the meal elevator leg.

(3) One (1) meal elevator leg that operates at a nominal capacity of 300 tons per hour.

(bb) One (1) truck meal loadout operation, identified as P14, approved in 1996 for construction, with a nominal throughput rate of 383.3 tons of meal per hour, controlled by baghouse C14, and exhausting to Stack 14. This operation consists of the following:

Facility Description [326 IAC 2-7-5(14)]:

(1) Three (3) totally enclosed drag conveyors (or equivalent) that transfer meal from the meal loadout bins to the truck.

(2) Two (2) truck loadout chutes, with only one chute having flow at any given time.

(cc) One (1) barge/railcar meal loadout operation, identified as P15, approved in 1996 for construction, with a nominal throughput rate of 383.3 tons of meal per hour, controlled by baghouse C15, and exhausting to Stack 15. This operation consists of the following:

(1) One (1) rail and barge loadout scalper with a totally enclosed ball breaker.

(2) One (1) rail and barge bulk weigh system consisting of one (1) upper garner, one (1) weigh hopper, and one (1) lower surge.

(3) One (1) totally enclosed drag conveyor (or equivalent) that transfers meal from the lower surge to rail or barge.

(4) Two (2) rail loadout systems, with only one system operating at a time.

(5) One (1) enclosed conveyor that transfers soybean meal from the lower surge to the barge loadout system.

(6) One (1) barge loadout 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.4.1 PSD Minor Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the PM, PM_{10}, and $PM_{2.5}$ emissions from the following emission units shall be limited as follows:

Unit ID	Unit Description	Control Device	PM Emission Limit (lbs/hr)	PM_{10} Emission Limit (lbs/hr)	$PM_{2.5}$ Emission Limit (lbs/hr)
P3	Kaolin Handling	Baghouse C3	0.10	0.10	0.10
P6	Hull Grinding	Baghouse C6	0.30	0.30	0.30
P7	Hull Storage	Baghouse C7	0.17	0.17	0.17
P7A or P7B	Hull Handling	Baghouse C7A	0.17	0.17	0.17
P8	Hull Pellet Cooler	Cyclone C8	5.14	5.14	5.14
P8A or P8B	Hull Pellet Storage	Baghouse C8A or Bin Vent Filter System C8B	0.17	0.17	0.17
P9	Meal Handling	Baghouse C9	0.26	0.26	0.26
P20	Meal Storage	Baghouse C20	0.26	0.26	0.26
P14	Truck Meal Loadout	Baghouse C14	0.69	0.69	0.69
P15	Barge/Railcar Meal Loadout	Baghouses C15	0.69	0.69	0.69

Compliance with these limits, in combination with the limits in Conditions D.1.2, D.2.1, and D.3.1 and the potential to emit from other units at the source, shall limit the potential to emit PM, PM_{10}, and $PM_{2.5}$ from the entire source to less than 250 tons per twelve (12) consecutive month period, each. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

D.4.2 Minor Source Modifications [326 IAC 2-7-10.5(d)]

Pursuant to 326 IAC 2-7-10.5(d)(4)(C) (Minor Source Modifications) and MSM 129-25576-00035, issued on January 14, 2008, the baghouse (identified as C7A) to be used in conjunction with the hull handling operation (identified as P7A and P7B) shall comply with the following limits when the hull handling operation is in operation:

(a) Operate with a control efficiency of at least 99%;

(b) Have no visible emissions; and

(c) PM and PM_{10} emissions shall be less than 5.7 lbs per hour and 3.42 lbs per hour, respectively.

D.4.3 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of following operations shall not exceed the pound per hour limits listed in the table below:

Unit ID	Unit Description	Process Rate (tons/hr)	Particulate Emission Limit (lbs/hr)
P3	Kaolin Handling	0.417	2.3
P6	Hull Grinding	8.05	16.6
P7	Hull Storage	15	25.2
P7A or P7B	Hull Handling	15	25.2
P8	Hull Pellet Cooler	15	25.2
P8A or P8B	Hull Pellet Storage	15	25.2
P9	Meal Handling	84.3	49.6
P20	Meal Storage Bins	300	63.0
P14	Truck Meal Loadout	383.3	65.8
P15	Barge/Railcar Meal Loadout	383.3	65.8

The pounds per hour limitation were calculated using one the following equations:

(a) Interpolation of the data for the process weight between one hundred (100) 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

(b) 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

Pursuant to 326 IAC 6-3-2(e)(3), when the process weight exceeds 200 tons per hour, the maximum allowable emission may exceed the emission limits shown in the table above, provided the concentration of particulate matter in the gas discharged to the atmosphere is less than 0.10 pounds per 1,000 pounds of gases.

D.4.4 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.4.5 Particulate Control

(a) In order to ensure compliance with Conditions D.4.1, D.4.2, and D.4.3, each of the following emission units shall be controlled by the associated baghouse or cyclone, as listed in the table below, when these units are in operation:

Unit ID	Unit Description	Control Device
P3	Kaolin Handling	Baghouse C3
P6	Hull Grinding	Baghouse C6
P7	Hull Storage	Baghouse C7
P7A & P7B	Hull Handling	Baghouse C7A
P8	Hull Pellet Cooler	Cyclone C8
P8A or P8B	Hull Pellet Storage	Baghouse C8A or Bin Vent Filter System C8B
P9	Meal Handling	Baghouse C9
P20	Meal Storage	Baghouse C20
P14	Truck Meal Loadout	Baghouse C14
P15	Barge/Railcar Meal Loadout	Baghouses C15

(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.4.6 Visible Emissions Notations [40 CFR 64]

(a) Pursuant to 40 CFR 64 (CAM), visible emission notations of the exhausts from the Stacks 6, 8, 9, 20, 14, and 15 shall be performed daily during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) Visible emission notations of the exhausts from the Stacks 3, 7, 7A, 8A, and 8B shall be performed daily during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(c) 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.

(d) In the case of batch or noncontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(e) 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.

(f) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.4.7 Parametric Monitoring [40 CFR 64]

(a) Pursuant to 40 CFR 64 (CAM), the Permittee shall record the pressure drop across the baghouses used in conjunction with the hull grinding operation (P6), the meal handling process (P9), the meal storage operation (P20), the truck meal loadout operation (P14), and the barge/railcar meal loadout operation (P15), at least once per day when the any of the these operations is in operation. When, for any one reading, the pressure drop across the baghouse is outside of the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 3.0 and 9.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test.

(b) The Permittee shall record the pressure drop across the baghouses used in conjunction with the kaolin handling operation (P3), the hull storage and operation (P7), the hull handling operation (P7A or P7B), and the pellet storage bins (P8A or P8B), at least once per day when the any of the these operations is in operation. When, for any one reading, the pressure drop across the baghouse is outside of the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 3.0 and 9.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test.

(c) Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(d) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.4.8 Broken or Failed Bag Detection

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed 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.

D.4.9 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.4.10 Record Keeping Requirements

(a) To document the compliance status with Condition D.4.6, the Permittee shall maintain records of the daily visible emission notations. 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 the compliance status with Condition D.4.7, the Permittee shall maintain once per day records of the pressure drop during normal operation for baghouses. 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) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required to be maintained by this condition.

SECTION D.5 FACILITY OPERATION CONDITIONS - Degreasing Operations

Facility Description [326 IAC 2-7-5(14)] - Insignificant Activities

(a) Degreasing operations that do not exceed 145 gallons per twelve (12) months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]

(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 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operation requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.5.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

SECTION E.1 Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units [40 CFR 60, Subpart Dc] [326 IAC 12]

Facility Description [326 IAC 2-7-5(14)]

(a) Three (3) 33.7 million (MM)Btu per hour natural gas boilers, identified as P17, P18, and P18A, approved in 1996 for construction, and exhausting to Stacks 17, 18, and 18A, respectively. Under NSPS, Subpart Dc, boilers P17, P18, and P18A are considered small industrial-commercial-institutional steam generating units.

(b) Two (2) wood/shredded tire fired boilers, identified as P17B and P17C, approved in 2006 for construction, each with a nominal heat input capacity of 57.3 MMBtu/hr, both controlled by one (1) electrostatic precipitator (ESP) (identified as ES1), and exhausting through Stack 17A. Stack 17A is equipped with a continuous opacity monitoring system (COMS). Under NSPS, Subpart Dc, boilers P17B and P17C are considered small industrial-commercial-institutional steam generating units.

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

New Source Performance Standards (NSPS)

E.1.1 General Provisions Relating to NSPS Dc [326 IAC 12-1] [40 CFR 60, Subpart A]

Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the facilities described in Section E.1 except as otherwise specified in 40 CFR Part 60, Subpart Dc.

E.1.2 Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units [40 CFR 60, Subpart Dc] [326 IAC 12]

Pursuant to 40 CFR 60, Subpart Dc, the Permittee shall comply with the provisions of Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, which are incorporated by reference as 326 IAC 12, (included as Attachment A of this permit) as specified as follows:

(a) 40 CFR 60.40c;
(b) 40 CFR 60.41c;
(c) 40 CFR 60.43c(b), (c), (d), (e)(1), (e)(2), (e)(3);
(d) 40 CFR 60.45c(a), (b), (c);
(e) 40 CFR 60.47c(a), (b), (d), (e), (g); and
(f) 40 CFR 60.48c(a), (c), (g), (h), (i), (j).

SECTION E.2 Standards of Performance for Grain Elevators [40 CFR 60, Subpart DD] [326 IAC 12]

Facility Description [326 IAC 2-7-5(14)]

(c) One (1) north truck receiving area, identified as P24, approved in 2001 for construction, with a nominal throughput capacity of 360 tons per hour, controlled by baghouse C24, and exhausting to Stack 24. Under NSPS, Subpart DD, this unit is considered a truck unloading station.

(d) One (1) north house bin loading area, identified as P27, approved in 2001 for construction, with a nominal throughput capacity of 360 tons per hour, and exhausting inside the north house, consisting of the following:

(1) One (1) totally enclosed aspirated elevator leg that transfers soybeans to enclosed conveyors.

(2) Two (2) enclosed conveyors that transfer the soybean from the north receiving area to the soybean storage areas.

Under NSPS, Subpart DD, this area is considered a grain handling operation.

(f) One (1) truck only soybean receiving area, identified as P1, approved in 1996 for construction, with a nominal throughput capacity of 600 tons per hour. This area consists of the following:

(1) One (1) truck only receiving pit.

(2) One (1) totally enclosed belt conveyor system (or equivalent), using an oil application to control PM emissions.

(3) One (1) aspirated soybean receiving leg, controlled by an oil application to control PM emissions and also controlled by baghouse C1, exhausting to Stack 1.

(4) One (1) enclosed belt conveyor that transfers the soybean from the receiving leg to the soybean enclosed belt conveyor.

(5) One (1) enclosed belt conveyor that loads the soybean storage silos.

Under NSPS, Subpart DD, the emission units at this area are considered a truck unloading station and grain handling operations.

(g) One (1) truck and railcar soybean receiving area, identified as P2, approved in 1996 for construction, with a nominal throughput capacity of 540 tons per hour, consisting of the following:

(1) One (1) truck and railcar receiving pit, with PM emissions controlled by restricting vehicles unloading grain at these stations to hopper-bottom rail cars and trucks with choke unloading applications.

(2) One (1) enclosed drag conveyor system (or equivalent), using an oil application to control PM emissions.

(3) Two (2) aspirated soybean receiving legs, using an oil application to control PM emissions and also controlled by baghouse C1, exhausting to Stack 1.

(4) One (1) aspirated bulkweigher, using and oil application to control PM emissions and also controlled by baghouse C1, exhausting to Stack 1.

(5) One (1) enclosed drag conveyor that transfers the soybean at a nominal rate of 540 tons per hour from the receiving leg to the soybean covered belt conveyor that loads the soybean silos.

Under NSPS, Subpart DD, the emission units at this area are considered truck and railcar unloading stations and grain handling operations.

(h) One (1) annex silo loading operation, identified as P2A, approved in 1996 for construction, with a nominal throughput rate of 1,740 tons per hour, controlled by an oil application system, and consisting of the following:

(1) Twelve (12) concrete soybean silos, each with a nominal storage capacity of 73,053 bushels.

(2) Four (4) concrete soybean storage silos, each with a nominal capacity of 19,375 bushels.

(3) Two (2) concrete soybean storage silos, each with a nominal capacity of 18,801 bushels.

(4) Three (3) totally enclosed drag conveyors (or equivalent) comprising two conveyance systems located below the storage silos that transfer the soybeans from the silos to the elevator legs.

Under NSPS, Subpart DD, this silo loading operation is considered a grain handling operation.

(i) One (1) soybean storage system, identified as P2B, approved in 2002 for construction and approved in 2009 for modification, with a nominal throughput of 116.4 tons per hour, controlled by an oil application system, and consisting of the following:

(1) Two (2) soybean silos (P2B and P2C), with a nominal combined storage capacity of 1,177,000 bushels.

(2) Two (2) enclosed belt conveyors.

(3) Two (2) enclosed drag conveyors.

Under NSPS, Subpart DD, this soybean storage system is considered a grain handling operation.

(j) One (1) soybean cleaning system, identified as P4, approved in 1996 for construction, with a nominal throughput rate of 115 tons per hour, controlled by baghouse C4, and exhausting to stack C4. This system consists of the following:

(1) Two (2) soybean elevator legs that transfer the soybeans from the drag conveyor to the cleaner, using an oil application to control PM emissions.

(2) One (1) totally enclosed conveyor that transfers the soybeans from the elevator legs to the magnet.

(3) One (1) magnet, using both an oil application and baghouse C4 to control PM emissions.

(4) One (1) cleaning system, consisting of the following:

(A) Two (2) cleaners, controlled by an oil application system and baghouse C4.

(B) Two (2) aspirators, controlled by an oil application system and baghouse C4.

(C) One (1) conveyor transferring beans from the aspirator to the hopper, controlled by an oil application system and baghouse C4.

(D) One (1) hopper, controlled by an oil application system and baghouse C4.

(E) One (1) scale, controlled by an oil application system and baghouse C4.

(F) One (1) aspirator, controlled by cyclone C5E, and exhausting to stack 5.

(G) One (1) breaker, controlled by cyclone C5E, and exhausting to stack 5.

Under NSPS, Subpart DD, this cleaning system is considered a grain handling operation.

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

New Source Performance Standards (NSPS)

E.2.1 General Provisions Relating to NSPS DD [326 IAC 12-1] [40 CFR 60, Subpart A]

Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the facilities described in Section E.2 except as otherwise specified in 40 CFR Part 60, Subpart DD.

E.2.2 Standards of Performance for Grain Elevators [40 CFR 60, Subpart DD] [326 IAC 12]

Pursuant to 40 CFR 60, Subpart DD, the Permittee shall comply with the provisions of Standards of Performance for Grain Elevators, which are incorporated by reference as 326 IAC 12, (included as Attachment B of this permit) as specified as follows:

(a) 40 CFR 60.300;
(b) 40 CFR 60.301;
(c) 40 CFR 60.302(b), (c)(1), (c)(2), (c)(3);
(d) 40 CFR 60.303; and
(e) 40 CFR 60.304.

SECTION E.3 National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production [40 CFR Part 63, Subpart GGGG] [326 IAC 20-60]

Facility Description [326 IAC 2-7-5(14)]

(e) One (1) soybean expander system, approved in 1996 for construction and approved in 2004 for modification, with a nominal capacity of 50 tons per hour. This system consists of the following:

(1) One (1) expander, forming soybean collets.

(2) One (1) totally enclosed conveying system transferring material from the expander system to the extraction system.

Under NESHAP, Subpart GGGG, these emission units are considered vegetable oil production processes.

(l) One (1) soybean heater with one (1) L-Path totally enclosed drag conveyor, identified as P21, approved in 1996 for construction and approved in 2008 for replacement, with a nominal capacity of 115 tons per hour, and exhausting to Stack 21. Under NESHAP, Subpart GGGG, the soybean heater is considered vegetable oil production processes.

(m) One (1) soybean cracking and dehulling operation, identified as P5, approved in 1996 for construction, with a nominal throughput rate of 115 tons per hour, and consisting of the following:

(1) One (1) enclosed drag conveyor (or equivalent) and one (1) totally enclosed overflow recycle L-Path conveyor (or equivalent) with a totally enclosed surge hopper that transfers soybeans to the jet dryers.

(2) Three (3) jet dryers, each with a nominal capacity of 42 tons per hour, controlled by cyclones C5A, C5B, and C5F, respectively, and exhausting to Stack 5.

(3) Three (3) primary CCD dryers, controlled by cyclones C5C and C5G, and exhausting to Stack 5.

(4) Three (3) secondary CCC coolers, controlled by cyclones C5D and C5H, and exhausting to Stack 5.

(5) Six (6) cracking and dehulling rolls that transfer the hulls through four (4) cyclones (C5C, C5D, C5G, and C5H) to an enclosed conveyor.

(6) One (1) totally enclosed cracking and dehulling drag conveyor (or equivalent) that transfers hulls from cyclones C5A and C5B to the hull grinding system, with a nominal throughput rate of 8.05 tons per hour.

(7) One (1) totally enclosed cracking and dehulling drag conveyor (or equivalent) that transfers hulls and aspirated fines from cyclones C5C, C5D, C5F, C5G, C5H, and the totally enclosed auger (or equivalent) of filter C4 to the hull screener and aspirator, with a nominal throughput rate of 8.05 tons per hour.

(8) One (1) hull screener and aspirator, with a nominal throughput rate of 8.05 tons per hour, controlled by cyclone C5E, and exhausting to Stack 5.

Under NESHAP, Subpart GGGG, these units are considered vegetable oil production

processes.

(s) One (1) soybean flaking operation, identified as P19, approved in 1996 for construction and approved in 2009 and in 2010 for modification, with a nominal throughput rate of 104.9 tons per hour, and consisting of the following:

(1) One (1) totally enclosed drag conveyor (or equivalent) and one (1) totally enclosed overflow recycle L-Path conveyor (or equivalent) with a totally enclosed surge hopper that transfers beans from cracking and dehulling to the flakers.

(2) Ten (10) flakers, controlled by baghouses C19A, C19B, and C19C, exhausting to Stack 19, and/or controlled by baghouse C19D, exhausting to Stack P19D.

(3) Two (2) totally enclosed drag conveyors (or equivalent) in series that transfer soybean flakes and collets from the flakers and the expander system to the feed screw conveyor.

(4) One (1) feed screw conveyor that transfers soybean flakes and collets to the extractor.

Under NESHAP, Subpart GGGG, these units are considered vegetable oil production processes.

(t) One (1) soybean oil extraction system, identified as P13, approved in 1996 for construction, controlled by mineral oil absorber system C13, and exhausting to Stack 13. This system consists of the following:

(1) One (1) soybean oil extractor, with a nominal capacity of 104.9 tons of soybean flakes and collets per hour and 104.9 tons of hexane per hour.

(2) One (1) desolventizer unit, with a nominal capacity of 86.8 tons of spent soybean flakes and collets per hour.

(3) A set of evaporators, with a nominal capacity of 20.7 tons of soybean oil per hour.

(4) A set of condensers and water separator to separate hexane and water, with a nominal capacity of 20.7 tons of soybean oil per hour.

(5) One (1) totally enclosed drag conveyor (or equivalent) that transfers flakes and hexane to the desolventizer at a nominal rate of 86.8 tons per hour and 34.5 tons per hour, respectively.

Under NESHAP, Subpart GGGG, these units are considered vegetable oil production processes.

(u) One (1) DTDC meal dryer section 1, identified as P10, approved in 1996 for construction, with a nominal drying capacity of 83.4 tons of meal per hour, controlled by cyclone C10, and exhausting to Stack 10. Under NESHAP, Subpart GGGG, this unit is considered a vegetable oil production process.

(v) One (1) DTDC meal dryer section 2, identified as P11, approved in 1996 for construction, with a nominal drying capacity of 83.4 tons of meal per hour, controlled by cyclone C11, and exhausting to Stack 11. Under NESHAP, Subpart GGGG, this unit is considered a vegetable oil production process.

(w) One (1) DTDC meal dryer section 3, identified as P12, approved in 2009 for modification, with

a nominal capacity of 83.4 tons of meal per hour, controlled by cyclone C12, and exhausting to Stack 12. Under NESHAP, Subpart GGGG, this unit is considered a vegetable oil production process.

(x) One (1) enclosed conveyor transferring meal from the meal dryer section 3 to the meal cooling operation, approved in 2009 for construction. Under NESHAP, Subpart GGGG, this unit is considered a vegetable oil production process.

(y) One (1) meal cooling operation, identified as P12A, approved in 2009 for construction, with a nominal capacity of 83.4 tons of meal per hour, controlled by cyclone C12A, and exhausting to Stack 12A. This operation consists of the following:

(1) Two (2) meal cooler sections, exhausting to the common cyclone C12A and Stack 12A.

(2) One (1) Meal Cooler enclosed drag conveyor (or equivalent) that transfers meal from the Meal Cooler and the C12A Cyclone to the one (1) DTDC enclosed drag conveyor.

(3) One (1) DTDC enclosed drag conveyor (or equivalent) that transfers meal from the Meal Cooler/DTDC and four (4) DTDC cyclones (C10, C11, C12, C12A) to the meal surge bin conveyor.

Under NESHAP, Subpart GGGG, these units are considered vegetable oil production processes.

(dd) Three (3) fixed roof hexane storage tanks.

(1) Two (2) fixed roof hexane storage tanks, approved in 1996 for construction, each with a nominal storage capacity of 14,000 gallons.

(2) One (1) horizontal fixed roof hexane storage tank, approved in 2012 for construction, with a nominal storage capacity of 28,000 gallons.

All hexane tanks are vented to the distillation system and exhausted through to Stack 13 (P13). Under NESHAP, Subpart GGGG, these tanks are considered vegetable oil production processes.

(ee) One (1) fixed roof hexane work tank, approved in 1996 for construction, with a nominal storage capacity of 8,000 gallons. Under NESHAP, Subpart GGGG, this tank is considered a vegetable oil production process.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP)

E.3.1 General Provisions Relating to NESHAP GGGG [326 IAC 20-1] [40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.2870, 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, as specified in 40 CFR Part 63, Subpart GGGG in accordance with schedule in 40 CFR 63 Subpart GGGG.

E.3.2 National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production [40 CFR Part 63, Subpart GGGG] [326 IAC 20-60]

The Permittee which engages in production of vegetable oil shall comply with the following provisions of 40 CFR 63, Subpart GGGG (included as Attachment C of this permit), as specified as follows:

(a) 40 CFR 63.2830;
(b) 40 CFR 63.2831;
(c) 40 CFR 63.2832(a);
(d) 40 CFR 63.2833;
(e) 40 CFR 63.2834(a);
(f) 40 CFR 63.2840 all except (e);
(g) 40 CFR 63.2850(a), (b), (d), (e)(1)(i), (e)(1)(iii), (e)(2);
(h) 40 CFR 63.2851;
(i) 40 CFR 63.2852;
(j) 40 CFR 63.2853;
(k) 40 CFR 63.2854;
(l) 40 CFR 63.2855;
(m) 40 CFR 63.2860;
(n) 40 CFR 63.2861;
(o) 40 CFR 63.2862;
(p) 40 CFR 63.2863;
(q) 40 CFR 63.2870;
(r) 40 CFR 63.2871; and
(s) 40 CFR 63.2872.

SECTION E.4 National Emission Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20-82]

Facility Description [326 IAC 2-7-5(14)]: Reciprocating Internal Combustion Engines

Specifically Regulated Insignificant Activities

(c) Emergency generators as follows: one (1) natural gas-fired emergency generator, approved in 1997 for construction, with a nominal generating rate of 343 kilowatts. Under NESHAP, Subpart ZZZZ, this engine is considered an existing affected source.

(d) Stationary fire pump engines as follows: two (2) diesel-fired pumps, one (1) approved in 1997 for construction and one (1) approved in 2012 for construction, each with a nominal power output rate of 305 hp. Under NESHAP, Subpart ZZZZ, this engine is considered a new affected source.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP)

E.4.1 General Provisions Relating to NESHAP ZZZZ [326 IAC 20-1] [40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.6665, 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, as specified in Table 8 of 40 CFR 63, Subpart ZZZZ in accordance with the Schedule in 40 CFR Part 63, Subpart ZZZZ.

E.4.2 National Emission Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20-82]

The Permittee which engages in the use of a reciprocating internal combustion engine shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment D of this permit):

(a) 40 CFR 63.6580;
(b) 40 CFR 63.6585(a), (b);
(c) 40 CFR 63.6590(a)(1)(ii);
(d) 40 CFR 63.6595(a)(1), (c);
(e) 40 CFR 63.6602;
(f) 40 CFR 63.6605;
(g) 40 CFR 63.6612;
(h) 40 CFR 63.6620;
(i) 40 CFR 63.6625(e), (f), (h), (i), (j);
(j) 40 CFR 63.6635;
(k) 40 CFR 63.6640(a), (b), (f)(1);
(l) 40 CFR 63.6645(a)(5);
(m) 40 CFR 63.6650(a), (b), (c)(1) through (c)(5), (d), (f);
(n) 40 CFR 63.6655(a), (d), (e)(2);
(o) 40 CFR 63.6660;
(p) 40 CFR 63.6665;
(q) 40 CFR 63.6670;
(r) 40 CFR 63.6675;
(s) Table 2c to 40 CFR 63 Subpart ZZZZ;
(t) Table 4 to 40 CFR 63 Subpart ZZZZ;
(u) Table 6 to 40 CFR 63 Subpart ZZZZ; and
(v) Table 7 to 40 CFR 63 Subpart ZZZZ.

SECTION E.5 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters

Facility Description [326 IAC 2-7-5(14)]:

(a) Three (3) 33.7 MMBtu per hour natural gas fired boilers, identified as P17, P18, and P18A, approved in 1996 for construction, and exhausting to Stacks 17, 18, and 18A, respectively. Under NESHAP, Subpart DDDDD, boilers P17, P18, and P18A are considered part of the existing, affected source.

(b) Two (2) wood/shredded tire fired boilers, identified as P17B and P17C, approved in 2006 for construction, each with a nominal heat input capacity of 57.3 MMBtu/hr, both controlled by one (1) electrostatic precipitator (ESP) (identified as ES1), and exhausting through Stack 17A. Stack 17A is equipped with a continuous opacity monitoring system (COMS). Under NESHAP, Subpart DDDDD, boilers P17B and P17C are considered part of the existing, affected source.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.5.1 General Provisions Relating to NESHAP DDDDD [326 IAC 20-1] [40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.7565, 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 wood/shredded tire fired boilers (P17B and P17C) as specified in Table 10 of 40 CFR Part 63, Subpart DDDDD in accordance with schedule in 40 CFR 63, Subpart DDDDD.

E.5.2 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR 63, Subpart DDDDD] [326 IAC 20-95]

Pursuant to 40 CFR 63.7495, the Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters) (included as Attachment E), which are incorporated by reference as 326 IAC 20-95:

(a) for the wood/shredded tire fired boilers (P17B and P17C):

(1) 40 CFR 63.7480
(2) 40 CFR 63.7485
(3) 40 CFR 63.7490
(4) 40 CFR 63.7495(b) and (d)
(5) 40 CFR 63.7499
(6) 40 CFR 63.7500
(7) 40 CFR 63.7505
(8) 40 CFR 63.7507
(9) 40 CFR 63.7510(a), (b), (c), and (d)
(10) 40 CFR 63.7515
(11) 40 CFR 63.7520(a), (b), (d), (e), (f), and (g)
(12) 40 CFR 63.7521
(13) 40 CFR 63.7522
(14) 40 CFR 63.7525
(15) 40 CFR 63.7530(a), (c), (d), and (e)
(16) 40 CFR 63.7535
(17) 40 CFR 63.7540
(18) 40 CFR 63.7541

(19) 40 CFR 63.7545(a), (b), (c), (d), (e)(1-7), and (e)(9)
(20) 40 CFR 63.7550 (a-f)
(21) 40 CFR 63.7555
(22) 40 CFR 63.7560
(23) 40 CFR 63.7565
(24) 40 CFR 63.7570
(25) Table 1 to 40 CFR 63, Subpart DDDDD
(26) Table 2 to 40 CFR 63, Subpart DDDDD
(27) Table 3 to 40 CFR 63, Subpart DDDDD
(28) Table 4 to 40 CFR 63, Subpart DDDDD
(29) Table 5 to 40 CFR 63, Subpart DDDDD
(30) Table 6 to 40 CFR 63, Subpart DDDDD
(31) Table 7 to 40 CFR 63, Subpart DDDDD
(32) Table 8 to 40 CFR 63, Subpart DDDDD
(33) Table 9 to 40 CFR 63, Subpart DDDDD
(34) Table 10 to 40 CFR 63, Subpart DDDDD
(35) Appendix A to 40 CFR 63, Subpart DDDDD

SECTION E.6 Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR 60, Subpart IIII] [326 IAC 12]

Facility Description [326 IAC 2-7-5(14)]

One (1) stationary diesel-fired fire pump engine, approved in 2012 for construction, with a nominal power output rate of 305 hp. Under NSPS, Subpart IIII, this engine is an affected source.

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

New Source Performance Standards (NSPS)

E.6.1 General Provisions Relating to NSPS IIII [326 IAC 12-1] [40 CFR 60, Subpart A]

Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the facilities described in Section E.6 except as otherwise specified in Table 8 to 40 CFR Part 60, Subpart IIII.

E.6.2 Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR 60, Subpart IIII] [326 IAC 12]

Pursuant to 40 CFR 60, Subpart IIII, the Permittee shall comply with the provisions of Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, which are incorporated by reference as 326 IAC 12, (included as Attachment F of this permit) as specified as follows:

(1) 40 CFR 60.4200(a)(2)(ii) and (a)(4)
(2) 40 CFR 60.4205(c) and (e)
(3) 40 CFR 60.4206
(4) 40 CFR 60.4207(b)
(5) 40 CFR 60.4208
(6) 40 CFR 60.4209, (a)
(7) 40 CFR 60.4211(a), (c), (f), and (g)(2)
(8) 40 CFR 60.4212, (a), (b), (c), and (e)
(9) 40 CFR 60.4214(b)
(10) 40 CFR 60.4218
(11) 40 CFR 60.4219
(12) Table 4 to 40 CFR 60, Subpart IIII
(13) Table 5 to 40 CFR 60, Subpart IIII
(14) Table 8 to 40 CFR 60, Subpart IIII

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Consolidated Grain and Barge Co.
Source Address: 2781 Bluff Road, Mt. Vernon, Indiana 47620
Part 70 Permit No.: T129-31079-00035

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): _____

☐ Other (specify): _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

100 North Senate Avenue
MC 61-53, IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Consolidated Grain and Barge Co.
Source Address: 2781 Bluff Road, Mt. Vernon, Indiana 47620
Part 70 Permit No.: T129-31079-00035

This form consists of 2 pages Page 1 of 2

☐ This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), no later than four (**4**) daytime business hours (1-800-451-6027 or 317-233-0178, ask for Compliance and Enforcement Branch); and
- The Permittee must submit notice in writing or by facsimile no later than 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 Describe: Type of Pollutants Emitted: ☐ TSP ☐ PM-10 ☐ SO_2 ☐ VOC ☐ NO_X ☐ CO ☐ Pb ☐ other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Quarterly Reports
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Consolidated Grain and Barge Co.
Source Address: 2781 Bluff Road, Mt. Vernon, Indiana 47620
Part 70 Permit No.: T129-31079-00035
Facility: Boilers P17B and P17C
Parameter: Total Equivalent Dry Wood Usage
Limit: Less than 51,875 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Total Equivalent Dry Wood Usage (tons) = Dry Wood Usage (tons) + [Wet Wood Usage (tons) / (1+Moisture Content of Wet Wood)] + 2.0 x Shredded Tire (tons) + 37.8 x NG Usage (MMCF)

QUARTER: _____ **YEAR:** _____

Month	Total Equivalent Dry Wood Usage for This Month (tons)	Total Equivalent Dry Wood Usage for Previous 11 Months (tons)	Total Equivalent Dry Wood Usage for 12-Month Period (tons)

☐ No deviation occurred in this quarter.

☐ Deviations occurred in this quarter.
Deviation has been reported on: _____

Submitted By: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Consolidated Grain and Barge Co.
Source Address: 2781 Bluff Road, Mt. Vernon, Indiana 47620
Part 70 Permit No.: T129-31079-00035
Facility: Boilers P17B and P17C
Parameter: Total Shredded Tire Usage
Limit: Less than 7,410 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: _____ **YEAR:** _____

Month	Total Shredded Tire Usage for This Month (tons)	Total Shredded Tire Usage for Previous 11 Months (tons)	Total Shredded Tire Usage for 12-Month Period (tons)

☐ No deviation occurred in this quarter.

☐ Deviations occurred in this quarter.
Deviation has been reported on: _____

Submitted By: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Consolidated Grain and Barge Co.
Source Address: 2781 Bluff Road, Mt. Vernon, Indiana 47620
Part 70 Permit No.: T129-31079-00035
Facility: Grain Receiving Facilities
Parameter: Total Grain Received (P1 and P2 Combined)
Limit: Less than 1,020,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month

QUARTER: _____ **YEAR:** _____

Month	Total Grain Received for This Month (tons)	Total Grain Received for Previous 11 Months (tons)	Total Grain Received for 12-Month Period (tons)

☐ No deviation occurred in this quarter.

☐ Deviations occurred in this quarter.
Deviation has been reported on: _____

Submitted By: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Consolidated Grain and Barge Co.
Source Address: 2781 Bluff Road, Mt. Vernon, Indiana 47620
Part 70 Permit No.: T129-31079-00035
Facility: Grain Processing Facilities
Parameter: Total Grain Processed
Limit: Less than 940,240 tons per twelve (12) consecutive month period with compliance determined at the end of each month

QUARTER: _____ **YEAR:** _____

Month	Total Grain Received for This Month (tons)	Total Grain Received for Previous 11 Months (tons)	Total Grain Received for 12-Month Period (tons)

☐ No deviation occurred in this quarter.

☐ Deviations occurred in this quarter.
Deviation has been reported on: _____

Submitted By: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Consolidated Grain and Barge Co.
Source Address: 2781 Bluff Road, Mt. Vernon, Indiana 47620
Part 70 Permit No.: T129-31079-00035
Facility: North House Bin Loading Area (P27)
Parameter: Total Grain Received
Limit: Less than 108,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month

QUARTER: _____ **YEAR:** _____

Month	Total Grain Received for This Month (tons)	Total Grain Received for Previous 11 Months (tons)	Total Grain Received for 12-Month Period (tons)

☐ No deviation occurred in this quarter.

☐ Deviations occurred in this quarter.
Deviation has been reported on: _____

Submitted By: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Consolidated Grain and Barge Co.
Source Address: 2781 Bluff Road, Mt. Vernon, Indiana 47620
Part 70 Permit No.: T129-31079-00035

Months: _____ to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B – Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C – General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".	
☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attachment A: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units [40 CFR 60, Subpart Dc]

Source: 72 FR 32759, June 13, 2007, unless otherwise noted.

§ 60.40c Applicability and delegation of authority.

(a) Except as provided in paragraphs (d), (e), (f), and (g) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/h)) or less, but greater than or equal to 2.9 MW (10 MMBtu/h).

(b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, §60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.

(c) Steam generating units that meet the applicability requirements in paragraph (a) of this section are not subject to the sulfur dioxide (SO_2) or particulate matter (PM) emission limits, performance testing requirements, or monitoring requirements under this subpart (§§60.42c, 60.43c, 60.44c, 60.45c, 60.46c, or 60.47c) during periods of combustion research, as defined in §60.41c.

(d) Any temporary change to an existing steam generating unit for the purpose of conducting combustion research is not considered a modification under §60.14.

(e) Affected facilities (*i.e.* heat recovery steam generators and fuel heaters) that are associated with stationary combustion turbines and meet the applicability requirements of subpart KKKK of this part are not subject to this subpart. This subpart will continue to apply to all other heat recovery steam generators, fuel heaters, and other affected facilities that are capable of combusting more than or equal to 2.9 MW (10 MMBtu/h) heat input of fossil fuel but less than or equal to 29 MW (100 MMBtu/h) heat input of fossil fuel. If the heat recovery steam generator, fuel heater, or other affected facility is subject to this subpart, only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The stationary combustion turbine emissions are subject to subpart GG or KKKK, as applicable, of this part.)

(f) Any affected facility that meets the applicability requirements of and is subject to subpart AAAA or subpart CCCC of this part is not subject to this subpart.

(g) Any facility that meets the applicability requirements and is subject to an EPA approved State or Federal section 111(d)/129 plan implementing subpart BBBB of this part is not subject to this subpart.

(h) Affected facilities that also meet the applicability requirements under subpart J or subpart Ja of this part are subject to the PM and NO_X standards under this subpart and the SO_2standards under subpart J or subpart Ja of this part, as applicable.

(i) Temporary boilers are not subject to this subpart.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009; 77 FR 9461, Feb. 16, 2012]

§ 60.41c Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-

month period at the maximum design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels derived from coal for the purposes of creating useful heat, including but not limited to solvent refined coal, gasified coal not meeting the definition of natural gas, coal-oil mixtures, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (kJ/kg) (6,000 Btu per pound (Btu/lb) on a dry basis.

Combined cycle system means a system in which a separate source (such as a stationary gas turbine, internal combustion engine, or kiln) provides exhaust gas to a steam generating unit.

Combustion research means the experimental firing of any fuel or combination of fuels in a steam generating unit for the purpose of conducting research and development of more efficient combustion or more effective prevention or control of air pollutant emissions from combustion, provided that, during these periods of research and development, the heat generated is not used for any purpose other than preheating combustion air for use by that steam generating unit (*i.e.* , the heat generated is released to the atmosphere without being used for space heating, process heating, driving pumps, preheating combustion air for other units, generating electricity, or any other purpose).

Conventional technology means wet flue gas desulfurization technology, dry flue gas desulfurization technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see §60.17), diesel fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D975 (incorporated by reference, see §60.17), kerosine, as defined by the American Society of Testing and Materials in ASTM D3699 (incorporated by reference, see §60.17), biodiesel as defined by the American Society of Testing and Materials in ASTM D6751 (incorporated by reference, see §60.17), or biodiesel blends as defined by the American Society of Testing and Materials in ASTM D7467 (incorporated by reference, see §60.17).

Dry flue gas desulfurization technology means a SO_2control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline reagent and water, whether introduced separately or as a premixed slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Emerging technology means any SO_2control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under §60.48c(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 51.24.

Fluidized bed combustion technology means a device wherein fuel is distributed onto a bed (or series of beds) of limestone aggregate (or other sorbent materials) for combustion; and these materials are forced upward in the device by the flow of combustion air and the gaseous products of combustion. Fluidized bed combustion technology includes, but is not limited to, bubbling bed units and circulating bed units.

Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).

Heat transfer medium means any material that is used to transfer heat from one point to another point.

Maximum design heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel (or combination of fuels) on a steady state basis as determined by the physical design and characteristics of the steam generating unit.

Natural gas means:

(1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or

(2) Liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see §60.17); or

(3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 megajoules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum, or a liquid fuel derived from crude oil or petroleum, including distillate oil and residual oil.

Potential sulfur dioxide emission rate means the theoretical SO_2emissions (nanograms per joule (ng/J) or lb/MMBtu heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see §60.17).

Steam generating unit means a device that combusts any fuel and produces steam or heats water or heats any heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Temporary boiler means a steam generating unit that combusts natural gas or distillate oil with a potential SO_2emissions rate no greater than 26 ng/J (0.060 lb/MMBtu), and the unit is designed to, and is capable of, being carried or moved from one location to another by means of, for example, wheels, skids, carrying handles, dollies, trailers, or platforms. A steam generating unit is not a temporary boiler if any one of the following conditions exists:

(1) The equipment is attached to a foundation.

(2) The steam generating unit or a replacement remains at a location for more than 180 consecutive days. Any temporary boiler that replaces a temporary boiler at a location and performs the same or similar function will be included in calculating the consecutive time period.

(3) The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least 2 years, and operates at that facility for at least 3 months each year.

(4) The equipment is moved from one location to another in an attempt to circumvent the residence time requirements of this definition.

Wet flue gas desulfurization technology means an SO_2control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of PM or SO_2.

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009; 77 FR 9461, Feb. 16, 2012]

§ 60.42c Standard for sulfur dioxide (SO_2).

(a) Except as provided in paragraphs (b), (c), and (e) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that combusts only coal shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO_2emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO_2emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2in excess of the emission limit is determined pursuant to paragraph (e)(2) of this section.

(b) Except as provided in paragraphs (c) and (e) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that:

(1) Combusts only coal refuse alone in a fluidized bed combustion steam generating unit shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 20 percent (0.20) of the potential SO_2emission rate (80 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2in excess of SO_2in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is fired with coal refuse, the affected facility subject to paragraph (a) of this section. If oil or any other fuel (except coal) is fired with coal refuse, the affected facility is subject to the 87 ng/J (0.20 lb/MMBtu) heat input SO_2emissions limit or the 90 percent SO_2reduction requirement specified in paragraph (a) of this section and the emission limit is determined pursuant to paragraph (e)(2) of this section.

(2) Combusts only coal and that uses an emerging technology for the control of SO_2emissions shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 50 percent (0.50) of the potential SO_2 emission rate (50 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 260 ng/J (0.60 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility is subject to the 50 percent SO_2 reduction requirement specified in this paragraph and the emission limit determined pursuant to paragraph (e)(2) of this section.

(c) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, alone or in combination with any other fuel, and is listed in paragraphs (c)(1), (2), (3), or (4) of this section shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of the emission limit determined pursuant to paragraph (e)(2) of this section. Percent reduction requirements are not applicable to affected facilities under paragraphs (c)(1), (2), (3), or (4).

(1) Affected facilities that have a heat input capacity of 22 MW (75 MMBtu/h) or less;

(2) Affected facilities that have an annual capacity for coal of 55 percent (0.55) or less and are subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for coal of 55 percent (0.55) or less.

(3) Affected facilities located in a noncontinental area; or

(4) Affected facilities that combust coal in a duct burner as part of a combined cycle system where 30 percent (0.30) or less of the heat entering the steam generating unit is from combustion of coal in the duct burner and 70 percent (0.70) or more of the heat entering the steam generating unit is from exhaust gases entering the duct burner.

(d) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 215 ng/J (0.50 lb/MMBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

(e) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, or coal and oil with any other fuel shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of the following:

(1) The percent of potential SO_2 emission rate or numerical SO_2 emission rate required under paragraph (a) or (b)(2) of this section, as applicable, for any affected facility that

(i) Combusts coal in combination with any other fuel;

(ii) Has a heat input capacity greater than 22 MW (75 MMBtu/h); and

(iii) Has an annual capacity factor for coal greater than 55 percent (0.55); and

(2) The emission limit determined according to the following formula for any affected facility that combusts coal, oil, or coal and oil with any other fuel:

$$E_s = \frac{(K_a H_a + K_b H_b + K_c H_c)}{(H_a + H_b + H_c)}$$

Where:

E_s= SO_2emission limit, expressed in ng/J or lb/MMBtu heat input;

K_a= 520 ng/J (1.2 lb/MMBtu);

K_b= 260 ng/J (0.60 lb/MMBtu);

K_c= 215 ng/J (0.50 lb/MMBtu);

H_a= Heat input from the combustion of coal, except coal combusted in an affected facility subject to paragraph (b)(2) of this section, in Joules (J) [MMBtu];

H_b= Heat input from the combustion of coal in an affected facility subject to paragraph (b)(2) of this section, in J (MMBtu); and

H_c= Heat input from the combustion of oil, in J (MMBtu).

(f) Reduction in the potential SO_2emission rate through fuel pretreatment is not credited toward the percent reduction requirement under paragraph (b)(2) of this section unless:

(1) Fuel pretreatment results in a 50 percent (0.50) or greater reduction in the potential SO_2emission rate; and

(2) Emissions from the pretreated fuel (without either combustion or post-combustion SO_2control) are equal to or less than the emission limits specified under paragraph (b)(2) of this section.

(g) Except as provided in paragraph (h) of this section, compliance with the percent reduction requirements, fuel oil sulfur limits, and emission limits of this section shall be determined on a 30-day rolling average basis.

(h) For affected facilities listed under paragraphs (h)(1), (2), (3), or (4) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under §60.48c(f), as applicable.

(1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 MMBtu/hr).

(2) Residual oil-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).

(3) Coal-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/h).

(4) Other fuels-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/h).

(i) The SO_2emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.

(j) For affected facilities located in noncontinental areas and affected facilities complying with the percent reduction standard, only the heat input supplied to the affected facility from the combustion of coal and oil is counted under this section. No credit is provided for the heat input to the affected facility from wood or other fuels or for heat derived from exhaust gases from other sources, such as stationary gas turbines, internal combustion engines, and kilns.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009; 77 FR 9462, Feb. 16, 2012]

§ 60.43c Standard for particulate matter (PM).

(a) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal or combusts mixtures of coal with other fuels and

has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:

(1) 22 ng/J (0.051 lb/MMBtu) heat input if the affected facility combusts only coal, or combusts coal with other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.

(2) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility combusts coal with other fuels, has an annual capacity factor for the other fuels greater than 10 percent (0.10), and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor greater than 10 percent (0.10) for fuels other than coal.

(b) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts wood or combusts mixtures of wood with other fuels (except coal) and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emissions limits:

(1) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood greater than 30 percent (0.30); or

(2) 130 ng/J (0.30 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood of 30 percent (0.30) or less and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for wood of 30 percent (0.30) or less.

(c) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, wood, or oil 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 exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. Owners and operators of an affected facility that elect to install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for measuring PM emissions according to the requirements of this subpart and are subject to a federally enforceable PM limit of 0.030 lb/MMBtu or less are exempt from the opacity standard specified in this paragraph (c).

(d) The PM and opacity standards under this section apply at all times, except during periods of startup, shutdown, or malfunction.

(e)(1) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 13 ng/J (0.030 lb/MMBtu) heat input, except as provided in paragraphs (e)(2), (e)(3), and (e)(4) of this section.

(2) As an alternative to meeting the requirements of paragraph (e)(1) of this section, the owner or operator of an affected facility for which modification commenced after February 28, 2005, may elect to meet the requirements of this paragraph. On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005 shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of both:

(i) 22 ng/J (0.051 lb/MMBtu) heat input derived from the combustion of coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels; and

(ii) 0.2 percent of the combustion concentration (99.8 percent reduction) when combusting coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels.

(3) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a heat input

capacity of 8.7 MW (30 MMBtu/h) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input.

(4) An owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM standard under §60.43c and not using a post-combustion technology (except a wet scrubber) to reduce PM or SO_2emissions is not subject to the PM limit in this section.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009; 77 FR 9462, Feb. 16, 2012]

§ 60.44c Compliance and performance test methods and procedures for sulfur dioxide.

(a) Except as provided in paragraphs (g) and (h) of this section and §60.8(b), performance tests required under §60.8 shall be conducted following the procedures specified in paragraphs (b), (c), (d), (e), and (f) of this section, as applicable. Section 60.8(f) does not apply to this section. The 30-day notice required in §60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator.

(b) The initial performance test required under §60.8 shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the percent reduction requirements and SO_2emission limits under §60.42c shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affect facility will be operated, but not later than 180 days after the initial startup of the facility. The steam generating unit load during the 30-day period does not have to be the maximum design heat input capacity, but must be representative of future operating conditions.

(c) After the initial performance test required under paragraph (b) of this section and §60.8, compliance with the percent reduction requirements and SO_2emission limits under §60.42c is based on the average percent reduction and the average SO_2emission rates for 30 consecutive steam generating unit operating days. A separate performance test is completed at the end of each steam generating unit operating day, and a new 30-day average percent reduction and SO_2emission rate are calculated to show compliance with the standard.

(d) If only coal, only oil, or a mixture of coal and oil is combusted in an affected facility, the procedures in Method 19 of appendix A of this part are used to determine the hourly SO_2emission rate (E_{ho}) and the 30-day average SO_2emission rate (E_{ao}). The hourly averages used to compute the 30-day averages are obtained from the CEMS. Method 19 of appendix A of this part shall be used to calculate $E_{ao}$when using daily fuel sampling or Method 6B of appendix A of this part.

(e) If coal, oil, or coal and oil are combusted with other fuels:

(1) An adjusted E_{ho}(E_{ho}o) is used in Equation 19–19 of Method 19 of appendix A of this part to compute the adjusted E_{ao}(E_{ao}o). The E_{ho}o is computed using the following formula:

$$E_{ho}o = \frac{E_{ho} - E_w(1 - X_j)}{X_j}$$

Where:

E_{ho}o = Adjusted E_{ho}, ng/J (lb/MMBtu);

E_{ho}= Hourly SO_2emission rate, ng/J (lb/MMBtu);

E_w= SO_2concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 9 of appendix A of this part, ng/J (lb/MMBtu). The value

E_w for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E_w if the owner or operator elects to assume $E_w = 0$.

X_k = Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(2) The owner or operator of an affected facility that qualifies under the provisions of §60.42c(c) or (d) (where percent reduction is not required) does not have to measure the parameters E_w or X_k if the owner or operator of the affected facility elects to measure emission rates of the coal or oil using the fuel sampling and analysis procedures under Method 19 of appendix A of this part.

(f) Affected facilities subject to the percent reduction requirements under §60.42c(a) or (b) shall determine compliance with the SO_2 emission limits under §60.42c pursuant to paragraphs (d) or (e) of this section, and shall determine compliance with the percent reduction requirements using the following procedures:

(1) If only coal is combusted, the percent of potential SO_2 emission rate is computed using the following formula:

$$\%P_s = 100\left(1 - \frac{\%R_g}{100}\right)\left(1 - \frac{\%R_f}{100}\right)$$

Where:

$\%P_s$ = Potential SO_2 emission rate, in percent;

$\%R_g$ = SO_2 removal efficiency of the control device as determined by Method 19 of appendix A of this part, in percent; and

$\%R_f$ = SO_2 removal efficiency of fuel pretreatment as determined by Method 19 of appendix A of this part, in percent.

(2) If coal, oil, or coal and oil are combusted with other fuels, the same procedures required in paragraph (f)(1) of this section are used, except as provided for in the following:

(i) To compute the $\%P_s$, an adjusted $\%R_g$ ($\%R_g o$) is computed from $E_{ao} o$ from paragraph (e)(1) of this section and an adjusted average SO_2 inlet rate ($E_{ai} o$) using the following formula:

$$\%R_g o = 100\left(1 - \frac{E^{\circ}_{ao}}{E^{\circ}_{ai}}\right)$$

Where:

$\%R_g o$ = Adjusted $\%R_g$, in percent;

$E_{ao} o$ = Adjusted E_{ao}, ng/J (lb/MMBtu); and

$E_{ai} o$ = Adjusted average SO_2 inlet rate, ng/J (lb/MMBtu).

(ii) To compute $E_{ai} o$, an adjusted hourly SO_2 inlet rate ($E_{hi} o$) is used. The $E_{hi} o$ is computed using the following formula:

$$E_{hi}o = \frac{E_{hi} - E_w(1 - X_k)}{X_k}$$

Where:

$E_{hi}o$ = Adjusted E_{hi}, ng/J (lb/MMBtu);

E_{hi}= Hourly SO_2inlet rate, ng/J (lb/MMBtu);

E_w= SO_2concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 19 of appendix A of this part, ng/J (lb/MMBtu). The value $E_w$for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure $E_w$if the owner or operator elects to assume E_w= 0; and

X_k= Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(g) For oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under §60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under §60.46c(d)(2).

(h) For affected facilities subject to §60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO_2standards based on fuel supplier certification, the performance test shall consist of the certification from the fuel supplier, as described in §60.48c(f), as applicable.

(i) The owner or operator of an affected facility seeking to demonstrate compliance with the SO_2standards under §60.42c(c)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(j) The owner or operator of an affected facility shall use all valid SO_2emissions data in calculating $\%P_s$and E_{ho}under paragraphs (d), (e), or (f) of this section, as applicable, whether or not the minimum emissions data requirements under §60.46c(f) are achieved. All valid emissions data, including valid data collected during periods of startup, shutdown, and malfunction, shall be used in calculating $\%P_s$or E_{ho}pursuant to paragraphs (d), (e), or (f) of this section, as applicable.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

§ 60.45c Compliance and performance test methods and procedures for particulate matter.

(a) The owner or operator of an affected facility subject to the PM and/or opacity standards under §60.43c shall conduct an initial performance test as required under §60.8, and shall conduct subsequent performance tests as requested by the Administrator, to determine compliance with the standards using the following procedures and reference methods, except as specified in paragraph (c) of this section.

(1) Method 1 of appendix A of this part shall be used to select the sampling site and the number of traverse sampling points.

(2) Method 3A or 3B of appendix A–2 of this part shall be used for gas analysis when applying Method 5 or 5B of appendix A–3 of this part or 17 of appendix A–6 of this part.

(3) Method 5, 5B, or 17 of appendix A of this part shall be used to measure the concentration of PM as follows:

(i) Method 5 of appendix A of this part may be used only at affected facilities without wet scrubber systems.

(ii) Method 17 of appendix A of this part may be used at affected facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of Sections 8.1 and 11.1 of Method 5B of appendix A of this part may be used in Method 17 of appendix A of this part only if Method 17 of appendix A of this part is used in conjunction with a wet scrubber system. Method 17 of appendix A of this part shall not be used in conjunction with a wet scrubber system if the effluent is saturated or laden with water droplets.

(iii) Method 5B of appendix A of this part may be used in conjunction with a wet scrubber system.

(4) The sampling time for each run shall be at least 120 minutes and the minimum sampling volume shall be 1.7 dry standard cubic meters (dscm) [60 dry standard cubic feet (dscf)] except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.

(5) For Method 5 or 5B of appendix A of this part, the temperature of the sample gas in the probe and filter holder shall be monitored and maintained at 160 ±14 °C (320±25 °F).

(6) For determination of PM emissions, an oxygen (O_2) or carbon dioxide (CO_2) measurement shall be obtained simultaneously with each run of Method 5, 5B, or 17 of appendix A of this part by traversing the duct at the same sampling location.

(7) For each run using Method 5, 5B, or 17 of appendix A of this part, the emission rates expressed in ng/J (lb/MMBtu) heat input shall be determined using:

(i) The O_2or CO_2measurements and PM measurements obtained under this section, (ii) The dry basis F factor, and

(iii) The dry basis emission rate calculation procedure contained in Method 19 of appendix A of this part.

(8) Method 9 of appendix A–4 of this part shall be used for determining the opacity of stack emissions.

(b) The owner or operator of an affected facility seeking to demonstrate compliance with the PM standards under §60.43c(b)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(c) In place of PM testing with Method 5 or 5B of appendix A–3 of this part or Method 17 of appendix A–6 of this part, an owner or operator may elect to install, calibrate, maintain, and operate a CEMS for monitoring PM emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who elects to continuously monitor PM emissions instead of conducting performance testing using Method 5 or 5B of appendix A–3 of this part or Method 17 of appendix A–6 of this part shall install, calibrate, maintain, and operate a CEMS and shall comply with the requirements specified in paragraphs (c)(1) through (c)(14) of this section.

(1) Notify the Administrator 1 month before starting use of the system.

(2) Notify the Administrator 1 month before stopping use of the system.

(3) The monitor shall be installed, evaluated, and operated in accordance with §60.13 of subpart A of this part.

(4) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under §60.8 of subpart A of this part or within 180 days of notification to the Administrator of use of CEMS if the owner or operator was previously determining compliance by Method 5, 5B, or 17 of appendix A of this part performance tests, whichever is later.

(5) The owner or operator of an affected facility shall conduct an initial performance test for PM emissions as required under §60.8 of subpart A of this part. Compliance with the PM emission limit shall be determined by using the CEMS specified in paragraph (d) of this section to measure PM and calculating a 24-hour block arithmetic average emission concentration using EPA Reference Method 19 of appendix A of this part, section 4.1.

(6) Compliance with the PM emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using CEMS outlet data.

(7) At a minimum, valid CEMS hourly averages shall be obtained as specified in paragraph (c)(7)(i) of this section for 75 percent of the total operating hours per 30-day rolling average.

(i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.

(ii) [Reserved]

(8) The 1-hour arithmetic averages required under paragraph (c)(7) of this section shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under §60.13(e)(2) of subpart A of this part.

(9) All valid CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (c)(7) of this section are not met.

(10) The CEMS shall be operated according to Performance Specification 11 in appendix B of this part.

(11) During the correlation testing runs of the CEMS required by Performance Specification 11 in appendix B of this part, PM and O_2(or CO_2) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and performance tests conducted using the following test methods.

(i) For PM, Method 5 or 5B of appendix A–3 of this part or Method 17 of appendix A–6 of this part shall be used; and

(ii) For O2 (or CO_2), Method 3A or 3B of appendix A–2 of this part, as applicable shall be used.

(12) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 2 in appendix F of this part. Relative Response Audit's must be performed annually and Response Correlation Audits must be performed every 3 years.

(13) When PM emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Administrator or EPA Reference Method 19 of appendix A of this part to provide, as necessary, valid emissions data for a minimum of 75 percent of total operating hours on a 30-day rolling average.

(14) As of January 1, 2012, and within 90 days after the date of completing each performance test, as defined in §60.8, conducted to demonstrate compliance with this subpart, you must submit relative accuracy test audit (*i.e.,* reference method) data and performance test (*i.e.,* compliance test) data, except opacity data, electronically to EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool (ERT) (see *http://www.epa.gov/ttn/chief/ert/ert tool.html/*) or other compatible electronic spreadsheet. Only data collected using test methods compatible with ERT are subject to this requirement to be submitted electronically into EPA's WebFIRE database.

(d) The owner or operator of an affected facility seeking to demonstrate compliance under §60.43c(e)(4) shall follow the applicable procedures under §60.48c(f). For residual oil-fired affected facilities, fuel supplier certifications are only allowed for facilities with heat input capacities between 2.9 and 8.7 MW (10 to 30 MMBtu/h).

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011; 77 FR 9463, Feb. 16, 2012]

§ 60.46c Emission monitoring for sulfur dioxide.

(a) Except as provided in paragraphs (d) and (e) of this section, the owner or operator of an affected facility subject to the SO_2emission limits under §60.42c shall install, calibrate, maintain, and operate a CEMS for measuring SO_2concentrations and either O_2or CO_2concentrations at the outlet of the SO_2control device (or the outlet of the steam generating unit if no SO_2control device is used), and shall record the output of the system. The owner or operator of an affected facility subject to the percent reduction requirements under §60.42c shall measure SO_2concentrations and either O_2or CO_2concentrations at both the inlet and outlet of the SO_2control device.

(b) The 1-hour average SO_2emission rates measured by a CEMS shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under §60.42c. Each 1-hour average SO_2emission rate must be based on at least 30 minutes of operation, and shall be calculated using the data points required under §60.13(h)(2). Hourly SO_2emission rates are not calculated if the affected facility is operated less than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day.

(c) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the CEMS.

(1) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 of appendix B of this part.

(2) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of appendix F of this part.

(3) For affected facilities subject to the percent reduction requirements under §60.42c, the span value of the SO_2CEMS at the inlet to the SO_2control device shall be 125 percent of the maximum estimated hourly potential SO_2emission rate of the fuel combusted, and the span value of the SO_2CEMS at the outlet from the SO_2control device shall be 50 percent of the maximum estimated hourly potential SO_2emission rate of the fuel combusted.

(4) For affected facilities that are not subject to the percent reduction requirements of §60.42c, the span value of the SO_2CEMS at the outlet from the SO_2control device (or outlet of the steam generating unit if no SO_2control device is used) shall be 125 percent of the maximum estimated hourly potential SO_2emission rate of the fuel combusted.

(d) As an alternative to operating a CEMS at the inlet to the SO_2control device (or outlet of the steam generating unit if no SO_2control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO_2emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEMS at the outlet from the SO_2control device (or outlet of the steam generating unit if no SO_2control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO_2emission rate by using Method 6B of appendix A of this part. Fuel sampling shall be conducted pursuant to either paragraph (d)(1) or (d)(2) of this section. Method 6B of appendix A of this part shall be conducted pursuant to paragraph (d)(3) of this section.

(1) For affected facilities combusting coal or oil, coal or oil samples shall be collected daily in an as-fired condition at the inlet to the steam generating unit and analyzed for sulfur content and heat content according the Method 19 of appendix A of this part. Method 19 of appendix A of this part provides procedures for converting these measurements into the format to be used in calculating the average SO_2input rate.

(2) As an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when

calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

(3) Method 6B of appendix A of this part may be used in lieu of CEMS to measure SO_2at the inlet or outlet of the SO_2control system. An initial stratification test is required to verify the adequacy of the Method 6B of appendix A of this part sampling location. The stratification test shall consist of three paired runs of a suitable $SO_2$and CO_2measurement train operated at the candidate location and a second similar train operated according to the procedures in §3.2 and the applicable procedures in section 7 of Performance Specification 2 of appendix B of this part. Method 6B of appendix A of this part, Method 6A of appendix A of this part, or a combination of Methods 6 and 3 of appendix A of this part or Methods 6C and 3A of appendix A of this part are suitable measurement techniques. If Method 6B of appendix A of this part is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B of appendix A of this part 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent (0.10).

(e) The monitoring requirements of paragraphs (a) and (d) of this section shall not apply to affected facilities subject to §60.42c(h) (1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO_2standards based on fuel supplier certification, as described under §60.48c(f), as applicable.

(f) The owner or operator of an affected facility operating a CEMS pursuant to paragraph (a) of this section, or conducting as-fired fuel sampling pursuant to paragraph (d)(1) of this section, shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive steam generating unit operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator.

§ 60.47c Emission monitoring for particulate matter.

(a) Except as provided in paragraphs (c), (d), (e), and (f) of this section, the owner or operator of an affected facility combusting coal, oil, or wood that is subject to the opacity standards under §60.43c shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility subject to an opacity standard in §60.43c(c) that is not required to use a COMS due to paragraphs (c), (d), (e), or (f) of this section that elects not to use a COMS shall conduct a performance test using Method 9 of appendix A–4 of this part and the procedures in §60.11 to demonstrate compliance with the applicable limit in §60.43c by April 29, 2011, within 45 days of stopping use of an existing COMS, or within 180 days after initial startup of the facility, whichever is later, and shall comply with either paragraphs (a)(1), (a)(2), or (a)(3) of this section. The observation period for Method 9 of appendix A–4 of this part performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation.

(1) Except as provided in paragraph (a)(2) and (a)(3) of this section, the owner or operator shall conduct subsequent Method 9 of appendix A–4 of this part performance tests using the procedures in paragraph (a) of this section according to the applicable schedule in paragraphs (a)(1)(i) through (a)(1)(iv) of this section, as determined by the most recent Method 9 of appendix A–4 of this part performance test results.

(i) If no visible emissions are observed, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later;

(ii) If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later;

(iii) If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 3 calendar months

from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later; or

(iv) If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 45 calendar days from the date that the most recent performance test was conducted.

(2) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A–4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A–4 of this part performance tests, elect to perform subsequent monitoring using Method 22 of appendix A–7 of this part according to the procedures specified in paragraphs (a)(2)(i) and (ii) of this section.

(i) The owner or operator shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel for which an opacity standard is applicable using Method 22 of appendix A–7 of this part and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (*i.e.* , 30 seconds per 10 minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (*i.e.,* 90 seconds per 30 minute period), the owner or operator shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation (*i.e.,* 90 seconds) or conduct a new Method 9 of appendix A–4 of this part performance test using the procedures in paragraph (a) of this section within 45 calendar days according to the requirements in §60.45c(a)(8).

(ii) If no visible emissions are observed for 10 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed.

(3) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A–4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A–4 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Administrator. The observations shall be similar, but not necessarily identical, to the requirements in paragraph (a)(2) of this section. For reference purposes in preparing the monitoring plan, see OAQPS “Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems.” This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Policy Group (D243–02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods.

(b) All COMS shall be operated in accordance with the applicable procedures under Performance Specification 1 of appendix B of this part. The span value of the opacity COMS shall be between 60 and 80 percent.

(c) Owners and operators of an affected facilities that burn only distillate oil that contains no more than 0.5 weight percent sulfur and/or liquid or gaseous fuels with potential sulfur dioxide emission rates of 26 ng/J (0.060 lb/MMBtu) heat input or less and that do not use a post-combustion technology to reduce SO2 or PM emissions and that are subject to an opacity standard in §60.43c(c) are not required to operate a COMS if they follow the applicable procedures in §60.48c(f).

(d) Owners or operators complying with the PM emission limit by using a PM CEMS must calibrate, maintain, operate, and record the output of the system for PM emissions discharged to the atmosphere as specified in §60.45c(c). The CEMS specified in paragraph §60.45c(c) shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

(e) Owners and operators of an affected facility that is subject to an opacity standard in §60.43c(c) and that does not use post-combustion technology (except a wet scrubber) for reducing PM, SO_2, or carbon monoxide (CO) emissions, burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur, and is operated such that emissions of CO discharged to the atmosphere from the affected facility are maintained at levels less than or equal to 0.15 lb/MMBtu on a boiler operating day average basis is not required to operate a COMS. Owners and

operators of affected facilities electing to comply with this paragraph must demonstrate compliance according to the procedures specified in paragraphs (e)(1) through (4) of this section; or

(1) You must monitor CO emissions using a CEMS according to the procedures specified in paragraphs (e)(1)(i) through (iv) of this section.

(i) The CO CEMS must be installed, certified, maintained, and operated according to the provisions in §60.58b(i)(3) of subpart Eb of this part.

(ii) Each 1-hour CO emissions average is calculated using the data points generated by the CO CEMS expressed in parts per million by volume corrected to 3 percent oxygen (dry basis).

(iii) At a minimum, valid 1-hour CO emissions averages must be obtained for at least 90 percent of the operating hours on a 30-day rolling average basis. The 1-hour averages are calculated using the data points required in §60.13(h)(2).

(iv) Quarterly accuracy determinations and daily calibration drift tests for the CO CEMS must be performed in accordance with procedure 1 in appendix F of this part.

(2) You must calculate the 1-hour average CO emissions levels for each steam generating unit operating day by multiplying the average hourly CO output concentration measured by the CO CEMS times the corresponding average hourly flue gas flow rate and divided by the corresponding average hourly heat input to the affected source. The 24-hour average CO emission level is determined by calculating the arithmetic average of the hourly CO emission levels computed for each steam generating unit operating day.

(3) You must evaluate the preceding 24-hour average CO emission level each steam generating unit operating day excluding periods of affected source startup, shutdown, or malfunction. If the 24-hour average CO emission level is greater than 0.15 lb/MMBtu, you must initiate investigation of the relevant equipment and control systems within 24 hours of the first discovery of the high emission incident and, take the appropriate corrective action as soon as practicable to adjust control settings or repair equipment to reduce the 24-hour average CO emission level to 0.15 lb/MMBtu or less.

(4) You must record the CO measurements and calculations performed according to paragraph (e) of this section and any corrective actions taken. The record of corrective action taken must include the date and time during which the 24-hour average CO emission level was greater than 0.15 lb/MMBtu, and the date, time, and description of the corrective action.

(f) An owner or operator of an affected facility that is subject to an opacity standard in §60.43c(c) is not required to operate a COMS provided that the affected facility meets the conditions in either paragraphs (f)(1), (2), or (3) of this section.

(1) The affected facility uses a fabric filter (baghouse) as the primary PM control device and, the owner or operator operates a bag leak detection system to monitor the performance of the fabric filter according to the requirements in section §60.48Da of this part.

(2) The affected facility uses an ESP as the primary PM control device, and the owner or operator uses an ESP predictive model to monitor the performance of the ESP developed in accordance and operated according to the requirements in section §60.48Da of this part.

(3) The affected facility burns only gaseous fuels and/or fuel oils that contain no greater than 0.5 weight percent sulfur, and the owner or operator operates the unit according to a written site-specific monitoring plan approved by the permitting authority. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard. For testing performed as part of this site-specific monitoring plan, the permitting authority may require as an alternative to the notification and reporting requirements specified in §§60.8 and 60.11 that the owner or operator submit any deviations with the excess emissions report required under §60.48c(c).

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011; 77 FR 9463, Feb. 16, 2012]

§ 60.48c Reporting and recordkeeping requirements.

(a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by §60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §60.42c, or §60.43c.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

(4) Notification if an emerging technology will be used for controlling SO_2emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

(b) The owner or operator of each affected facility subject to the SO_2emission limits of §60.42c, or the PM or opacity limits of §60.43c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS and/or COMS using the applicable performance specifications in appendix B of this part.

(c) In addition to the applicable requirements in §60.7, the owner or operator of an affected facility subject to the opacity limits in §60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in paragraphs (c)(1) through (3) of this section, as applicable to the visible emissions monitoring method used.

(1) For each performance test conducted using Method 9 of appendix A–4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (c)(1)(i) through (iii) of this section.

(i) Dates and time intervals of all opacity observation periods;

(ii) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

(iii) Copies of all visible emission observer opacity field data sheets;

(2) For each performance test conducted using Method 22 of appendix A–4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (c)(2)(i) through (iv) of this section.

(i) Dates and time intervals of all visible emissions observation periods;

(ii) Name and affiliation for each visible emission observer participating in the performance test;

(iii) Copies of all visible emission observer opacity field data sheets; and

(iv) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the owner or operator to demonstrate compliance with the applicable monitoring requirements.

(3) For each digital opacity compliance system, the owner or operator shall maintain records and submit reports according to the requirements specified in the site-specific monitoring plan approved by the Administrator

(d) The owner or operator of each affected facility subject to the SO_2emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall submit reports to the Administrator.

(e) The owner or operator of each affected facility subject to the SO_2emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall keep records and submit reports as required under paragraph (d) of this section, including the following information, as applicable.

(1) Calendar dates covered in the reporting period.

(2) Each 30-day average SO_2emission rate (ng/J or lb/MMBtu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.

(3) Each 30-day average percent of potential SO_2emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of the corrective actions taken.

(4) Identification of any steam generating unit operating days for which SO_2or diluent (O_2or CO_2) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.

(5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.

(6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

(7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.

(8) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS.

(9) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 of appendix B of this part.

(10) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.

(11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), (3), or (4) of this section, as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

(f) Fuel supplier certification shall include the following information:

(1) For distillate oil:

(i) The name of the oil supplier;

(ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c; and

(iii) The sulfur content or maximum sulfur content of the oil.

(2) For residual oil:

(i) The name of the oil supplier;

(ii) The location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility, or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility, or other location;

(iii) The sulfur content of the oil from which the shipment came (or of the shipment itself); and

(iv) The method used to determine the sulfur content of the oil.

(3) For coal:

(i) The name of the coal supplier;

(ii) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the sample was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected);

(iii) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and

(iv) The methods used to determine the properties of the coal.

(4) For other fuels:

(i) The name of the supplier of the fuel;

(ii) The potential sulfur emissions rate or maximum potential sulfur emissions rate of the fuel in ng/J heat input; and

(iii) The method used to determine the potential sulfur emissions rate of the fuel.

(g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

(2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO_2standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

(3) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in §60.42C to use fuel certification to demonstrate compliance with the SO_2standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

(h) The owner or operator of each affected facility subject to a federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under §60.42c or §60.43c shall calculate the annual capacity factor individually for each fuel combusted. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month.

(i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

(j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

Attachment B: Standards of Performance for Grain Elevators
[40 CFR 60, Subpart DD]

Source: 43 FR 34347, Aug. 3, 1978, unless otherwise noted.

§ 60.300 Applicability and designation of affected facility.

(a) The provisions of this subpart apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under §60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

(b) Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after August 3, 1978, is subject to the requirements of this part.

[43 FR 34347, Aug. 3, 1978, as amended at 52 FR 42434, Nov. 5, 1988]

§ 60.301 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.

(a) *Grain* means corn, wheat, sorghum, rice, rye, oats, barley, and soybeans.

(b) *Grain elevator* means any plant or installation at which grain is unloaded, handled, cleaned, dried, stored, or loaded.

(c) *Grain terminal elevator* means any grain elevator which has a permanent storage capacity of more than 88,100 m^3 (ca. 2.5 million U.S. bushels), except those located at animal food manufacturers, pet food manufacturers, cereal manufacturers, breweries, and livestock feedlots.

(d) *Permanent storage capacity* means grain storage capacity which is inside a building, bin, or silo.

(e) *Railcar* means railroad hopper car or boxcar.

(f) *Grain storage elevator* means any grain elevator located at any wheat flour mill, wet corn mill, dry corn mill (human consumption), rice mill, or soybean oil extraction plant which has a permanent grain storage capacity of 35,200 m^3 (ca. 1 million bushels).

(g) *Process emission* means the particulate matter which is collected by a capture system.

(h) *Fugitive emission* means the particulate matter which is not collected by a capture system and is released directly into the atmosphere from an affected facility at a grain elevator.

(i) *Capture system* means the equipment such as sheds, hoods, ducts, fans, dampers, etc. used to collect particulate matter generated by an affected facility at a grain elevator.

(j) *Grain unloading station* means that portion of a grain elevator where the grain is transferred from a truck, railcar, barge, or ship to a receiving hopper.

(k) *Grain loading station* means that portion of a grain elevator where the grain is transferred from the elevator to a truck, railcar, barge, or ship.

(l) *Grain handling operations* include bucket elevators or legs (excluding legs used to unload barges or ships), scale hoppers and surge bins (garners), turn heads, scalpers, cleaners, trippers, and the headhouse and other such structures.

(m) *Column dryer* means any equipment used to reduce the moisture content of grain in which the grain flows from the top to the bottom in one or more continuous packed columns between two perforated metal sheets.

(n) *Rack dryer* means any equipment used to reduce the moisture content of grain in which the grain flows from the top to the bottom in a cascading flow around rows of baffles (racks).

(o) *Unloading leg* means a device which includes a bucket-type elevator which is used to remove grain from a barge or ship.

[43 FR 34347, Aug. 3, 1978, as amended at 65 FR 61759, Oct. 17, 2000]

§ 60.302 Standard for particulate matter.

(a) On and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere any gases which exhibit greater than 0 percent opacity from any:

(1) Column dryer with column plate perforation exceeding 2.4 mm diameter (ca. 0.094 inch).

(2) Rack dryer in which exhaust gases pass through a screen filter coarser than 50 mesh.

(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 any affected facility except a grain dryer any process emission which:

(1) Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).

(2) Exhibits greater than 0 percent opacity.

(c) On and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere any fugitive emission from:

(1) Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.

(2) Any grain handling operation which exhibits greater than 0 percent opacity.

(3) Any truck loading station which exhibits greater than 10 percent opacity.

(4) Any barge or ship loading station which exhibits greater than 20 percent opacity.

(d) The owner or operator of any barge or ship unloading station shall operate as follows:

(1) The unloading leg shall be enclosed from the top (including the receiving hopper) to the center line of the bottom pulley and ventilation to a control device shall be maintained on both sides of the leg and the grain receiving hopper.

(2) The total rate of air ventilated shall be at least 32.1 actual cubic meters per cubic meter of grain handling capacity (ca. 40 ft^3 /bu).

(3) Rather than meet the requirements of paragraphs (d)(1) and (2) of this section the owner or operator may use other methods of emission control if it is demonstrated to the Administrator's satisfaction that they would reduce emissions of particulate matter to the same level or less.

§ 60.303 Test methods and procedures.

(a) 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). Acceptable alternative methods and procedures are given in paragraph (c) of this section.

(b) The owner or operator shall determine compliance with the particulate matter standards in §60.302 as follows:

(1) Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

(2) Method 2 shall be used to determine the ventilation volumetric flow rate.

(3) Method 9 and the procedures in §60.11 shall be used to determine opacity.

(c) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:

(1) For Method 5, Method 17 may be used.

[54 FR 6674, Feb. 14, 1989]

§ 60.304 Modifications.

(a) The factor 6.5 shall be used in place of “annual asset guidelines repair allowance percentage,” to determine whether a capital expenditure as defined by §60.2 has been made to an existing facility.

(b) The following physical changes or changes in the method of operation shall not by themselves be considered a modification of any existing facility:

(1) The addition of gravity loadout spouts to existing grain storage or grain transfer bins.

(2) The installation of automatic grain weighing scales.

(3) Replacement of motor and drive units driving existing grain handling equipment.

(4) The installation of permanent storage capacity with no increase in hourly grain handling capacity.

Attachment C: National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production [40 CFR 63, Subpart GGGG]

Source: 66 FR 19011, Apr. 12, 2001, unless otherwise noted.

What This Subpart Covers

§ 63.2830 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for emissions during vegetable oil production. This subpart limits hazardous air pollutant (HAP) emissions from specified vegetable oil production processes. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission standards.

§ 63.2831 Where can I find definitions of key words used in this subpart?

You can find definitions of key words used in this subpart in §63.2872.

§ 63.2832 Am I subject to this subpart?

(a) You are an affected source subject to this subpart if you meet all of the criteria listed in paragraphs (a)(1) and (2) of this section:

(1) You own or operate a vegetable oil production process that is a major source of HAP emissions or is collocated within a plant site with other sources that are individually or collectively a major source of HAP emissions.

(i) A *vegetable oil production process* is defined in §63.2872. In general, it is the collection of continuous process equipment and activities that produce crude vegetable oil and meal products by removing oil from oilseeds listed in Table 1 to §63.2840 through direct contact with an organic solvent, such as a hexane isomer blend.

(ii) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year.

(2) Your vegetable oil production process processes any combination of eight types of oilseeds listed in paragraphs (a)(2)(i) through (viii) of this section:

(i) Corn germ;

(ii) Cottonseed;

(iii) Flax;

(iv) Peanut;

(v) Rapeseed (for example, canola);

(vi) Safflower;

(vii) Soybean; and

(viii) Sunflower.

(b) You are not subject to this subpart if your vegetable oil production process meets any of the criteria listed in paragraphs (b)(1) through (4) of this section:

(1) It uses only mechanical extraction techniques that use no organic solvent to remove oil from a listed oilseed.

(2) It uses only batch solvent extraction and batch desolventizing equipment.

(3) It processes only agricultural products that are not listed oilseeds as defined in §63.2872.

(4) It functions only as a research and development facility and is not a major source.

(c) As listed in §63.1(c)(5) of the General Provisions, if your HAP emissions increase such that you become a major source, then you are subject to all of the requirements of this subpart.

§ 63.2833 Is my source categorized as existing or new?

(a) This subpart applies to each existing and new affected source. You must categorize your vegetable oil production process as either an existing or a new source in accordance with the criteria in Table 1 of this section, as follows:

Table 1 to §63.2833—Categorizing Your Source as Existing or New

If your affected source...	And if...	Then your affected source...
(1) was constructed or began construction before May 26, 2000	reconstruction has not occurred	is an existing source.
(2) began reconstruction, as defined in §63.2, on or after May 26, 2000	(i) reconstruction was part of a scheduled plan to comply with the existing source requirements of this subpart; and (ii) reconstruction was completed no later than 3 years after the effective date of this subpart	remains an existing source.
(3) began a significant modification, as defined in §63.2872, at any time on an existing source	the modification does not constitute reconstruction	remains an existing source.
(4) began a significant modification, as defined in §63.2872, at any time on a new source	the modification does not constitute reconstruction	remains a new source.
(5) began reconstruction on or after May 26, 2000	reconstruction was completed later than 3 years after the effective date of this subpart	is a new source
(6) began construction on or after May 26, 2000		is a new source.

(b) *Reconstruction of a source.* Any affected source is reconstructed if components are replaced so that the criteria in the definition of *reconstruction* in §63.2 are satisfied. In general, a vegetable oil production process is reconstructed if the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost for constructing a new vegetable oil production process, and it is technically and economically feasible for the reconstructed source to meet the relevant new source requirements of this subpart. The effect of reconstruction on the categorization of your existing and new affected source is described in paragraphs (b)(1) and (2) of this section:

(1) After reconstruction of an existing source, the affected source is recategorized as a new source and becomes subject to the new source requirements of this subpart.

(2) After reconstruction of a new source, the affected source remains categorized as a new source and remains subject to the new source requirements of this subpart.

(c) *Significant modification of a source.* A significant modification to an affected source is a term specific to this subpart and is defined in §63.2872.

(1) In general, a significant modification to your source consists of adding new equipment or the modification of existing equipment within the affected source that significantly affects solvent losses from the affected source. Examples include adding or replacing extractors, desolventizer-toasters (conventional and specialty), and meal dryer-coolers. All other significant modifications must meet the criteria listed in paragraphs (c)(1)(i) and (ii) of this section:

(i) The fixed capital cost of the modification represents a significant percentage of the fixed capital cost of building a comparable new vegetable oil production process.

(ii) It does not constitute reconstruction as defined in §63.2.

(2) A significant modification has no effect on the categorization of your source as existing and new. An existing source remains categorized as an existing source and subject to the existing source requirements of this subpart. A new source remains categorized as a new source and subject to the new source requirements of this subpart.

(d) Changes in the type of oilseed processed by your affected source does not affect the categorization of your source as new or existing. Recategorizing an affected source from existing to new occurs only when you add or modify process equipment within the source which meets the definition of *reconstruction.*

§ 63.2834 When do I have to comply with the standards in this subpart?

You must comply with this subpart in accordance with one of the schedules in Table 1 of this section, as follows:

Table 1 of §63.2834—Compliance Dates for Existing and New Sources

If your affected source is categorized as...	And if...	Then your compliance date is...
(a) an existing source		3 years after the effective date of this subpart.
(b) a new source	you startup your affected source before the effective date of this subpart	the effective date of this subpart.

(c) a new source	you startup your affected source on or after the effective date of this subpart	your startup date.

Standards

§ 63.2840 What emission requirements must I meet?

For each facility meeting the applicability criteria in §63.2832, you must comply with either the requirements specified in paragraphs (a) through (d), or the requirements in paragraph (e) of this section.

(a)(1) The emission requirements limit the number of gallons of HAP lost per ton of listed oilseeds processed. For each operating month, you must calculate a compliance ratio which compares your actual HAP loss to your allowable HAP loss for the previous 12 operating months as shown in Equation 1 of this section. An operating month, as defined in §63.2872, is any calendar month in which a source processes a listed oilseed, excluding any entire calendar month in which the source operated under an initial startup period subject to §63.2850(c)(2) or (d)(2) or a malfunction period subject to §63.2850(e)(2). Equation 1 of this section follows:

$$\text{Compliance Ratio} = \frac{\text{Actual Hap Loss}}{\text{Allowable Hap Loss}} \qquad (Eq.\ 1)$$

(2) Equation 1 of this section can also be expressed as a function of total solvent loss as shown in Equation 2 of this section. Equation 2 of this section follows:

$$\text{Compliance Ratio} = \frac{f * \text{Actual Solvent Loss}}{0.64 * \sum_{i=1}^{n}\left((\text{Oilseed})_i * (\text{SLF})_i\right)} \qquad (Eq.\ 2)$$

Where:

f = The weighted average volume fraction of HAP in solvent received during the previous 12 operating months, as determined in §63.2854, dimensionless.

0.64 = The average volume fraction of HAP in solvent in the baseline performance data, dimensionless.

Actual Solvent Loss = Gallons of actual solvent loss during previous 12 operating months, as determined in §63.2853.

Oilseed = Tons of each oilseed type “i” processed during the previous 12 operating months, as shown in §63.2855.

SLF = The corresponding solvent loss factor (gal/ton) for oilseed “i” listed in Table 1 of this section, as follows:

Table 1 of §63.2840—Oilseed Solvent Loss Factors for Determining Allowable HAP Loss

Type of oilseed process	A source that...	Oilseed solvent loss factor (gal/ton)	
		Existing sources	New sources
(i) Corn Germ, Wet Milling	processes corn germ that has been separated from other corn components using a “wet” process of centrifuging a slurry steeped in a dilute sulfurous acid solution	0.4	0.3
(ii) Corn Germ, Dry Milling	processes corn germ that has been separated from the other corn components using a “dry” process of mechanical chafing and air sifting	0.7	0.7
(iii) Cottonseed, Large	processes 120,000 tons or more of a combination of cottonseed and other listed oilseeds during all normal operating periods in a 12 operating month period	0.5	0.4
(iv) Cottonseed, Small	processes less than 120,000 tons of a combination of cottonseed and other listed oilseeds during all normal operating periods in a 12 operating month period	0.7	0.4
(v) Flax	processes flax	0.6	0.6
(vi) Peanuts	processes peanuts	1.2	0.7
(vii) Rapeseed	processes rapeseed	0.7	0.3
(viii) Safflower	processes safflower	0.7	0.7
(ix) Soybean, Conventional	uses a conventional style desolventizer to produce crude soybean oil products and soybean animal feed products	0.2	0.2
(x) Soybean, Specialty	uses a special style desolventizer to produce soybean meal products for human and animal consumption	1.7	1.5
(xi) Soybean, Combination Plant with Low Specialty Production	processes soybeans in both specialty and conventional desolventizers and the quantity of soybeans processed in specialty desolventizers during normal operating periods is less than 3.3 percent of total soybeans processed during all normal operating periods in a 12 operating month period. The corresponding solvent loss factor is an overall value and applies to the total quantity of soybeans processed.	0.25	0.25
(xii) Sunflower	processes sunflower	0.4	0.3

(b) When your source has processed listed oilseed for 12 operating months, calculate the compliance ratio by the end of each calendar month following an operating month using Equation 2 of this section. When calculating your compliance ratio, consider the conditions and exclusions in paragraphs (b)(1) through (6) of this section:

(1) If your source processes any quantity of listed oilseeds in a calendar month and the source is not operating under an initial startup period or malfunction period subject to §63.2850, then you must categorize the month as an operating month, as defined in §63.2872.

(2) The 12-month compliance ratio may include operating months occurring prior to a source shutdown and operating months that follow after the source resumes operation.

(3) If your source shuts down and processes no listed oilseed for an entire calendar month, then you must categorize the month as a nonoperating month, as defined in §63.2872. Exclude any nonoperating months from the compliance ratio determination.

(4) If your source is subject to an initial startup period as defined in §63.2872, exclude from the compliance ratio determination any solvent and oilseed information recorded for the initial startup period.

(5) If your source is subject to a malfunction period as defined in §63.2872, exclude from the compliance ratio determination any solvent and oilseed information recorded for the malfunction period.

(6) For sources processing cottonseed or specialty soybean, the solvent loss factor you use to determine the compliance ratio may change each operating month depending on the tons of oilseed processed during all normal operating periods in a 12 operating month period.

(c) If the compliance ratio is less than or equal to 1.00, your source was in compliance with the HAP emission requirements for the previous operating month.

(d) To determine the compliance ratio in Equation 2 of this section, you must select the appropriate oilseed solvent loss factor from Table 1 of this section. First, determine whether your source is new or existing using Table 1 of §63.2833. Then, under the appropriate existing or new source column, select the oilseed solvent loss factor that corresponds to each type oilseed or process operation for each operating month.

(e) *Low-HAP solvent option.* For all vegetable oil production processes subject to this subpart, you must exclusively use solvent where the volume fraction of each HAP comprises 1 percent or less by volume of the solvent (low-HAP solvent) in each delivery, and you must meet the requirements in paragraphs (e)(1) through (5) of this section. Your vegetable oil production process is not subject to the requirements in §§63.2850 through 63.2870 unless specifically referenced in paragraphs (e)(1) through (5) of this section.

(1) You shall determine the HAP content of your solvent in accordance with the specifications in §63.2854(b)(1).

(2) You shall maintain documentation of the HAP content determination for each delivery of the solvent at the facility at all times.

(3) You must submit an initial notification for existing sources in accordance with §63.2860(a).

(4) You must submit an initial notification for new and reconstructed sources in accordance with §63.2860(b).

(5) You must submit an annual compliance certification in accordance with §63.2861(a). The certification should only include the information required under §63.2861(a)(1) and (2), and a certification indicating whether the source complied with all of the requirements in paragraph (e) of this section.

(f) You may change compliance options for your source if you submit a notice to the Administrator at least 60 days prior to changing compliance options. If your source changes from the low-HAP solvent option to the compliance ratio determination option, you must determine the compliance ratio for the most recent 12 operating months beginning with the first month after changing compliance options.

[66 FR 19011, Apr. 12, 2001, as amended at 69 FR 53341, Sept. 1, 2004]

Compliance Requirements

§ 63.2850 How do I comply with the hazardous air pollutant emission standards?

(a) *General requirements.* The requirements in paragraphs (a)(1)(i) through (iv) of this section apply to all affected sources:

(1) Submit the necessary notifications in accordance with §63.2860, which include:

(i) Initial notifications for existing sources.

(ii) Initial notifications for new and reconstructed sources.

(iii) Initial notifications for significant modifications to existing or new sources.

(iv) Notification of compliance status.

(2) Develop and implement a plan for demonstrating compliance in accordance with §63.2851.

(3) Develop a written startup, shutdown and malfunction (SSM) plan in accordance with the provisions in §63.2852.

(4) Maintain all the necessary records you have used to demonstrate compliance with this subpart in accordance with §63.2862.

(5) Submit the reports in paragraphs (a)(5)(i) through (iii) of this section:

(i) Annual compliance certifications in accordance with §63.2861(a).

(ii) Periodic SSM reports in accordance with §63.2861(c).

(iii) Immediate SSM reports in accordance with §63.2861(d).

(6) Submit all notifications and reports and maintain all records required by the General Provisions for performance testing if you add a control device that destroys solvent.

(b) *Existing sources under normal operation.* You must meet all of the requirements listed in paragraph (a) of this section and table 1 of this section for sources under normal operation, and the schedules for demonstrating compliance for existing sources under normal operation in table 2 of this section.

(c) *New sources.* Your new source, including a source that is categorized as new due to reconstruction, must meet the requirements associated with one of two compliance options. Within 15 days of the startup date, you must choose to comply with one of the options listed in paragraph (c)(1) or (2) of this section:

(1) *Normal operation.* Upon startup of your new source, you must meet all of the requirements listed in §63.2850(a) and table 1 of this section for sources under normal operation, and the schedules for demonstrating compliance for new sources under normal operation in table 2 of this section.

(2) *Initial startup period.* For up to 6 calendar months after the startup date of your new source, you must meet all of the requirements listed in paragraph (a) of this section and table 1 of this section for sources operating under an initial startup period, and the schedules for demonstrating compliance for new sources operating under an initial startup period in Table 2 of this section. After a maximum of 6 calendar months,

your new source must then meet all of the requirements listed in table 1 of this section for sources under normal operation.

(d) *Existing or new sources that have been significantly modified.* Your existing or new source that has been significantly modified must meet the requirements associated with one of two compliance options. Within 15 days of the modified source startup date, you must choose to comply with one of the options listed in paragraph (d)(1) or (2) of this section:

(1) *Normal operation.* Upon startup of your significantly modified existing or new source, you must meet all of the requirements listed in paragraph (a) of this section and table 1 of this section for sources under normal operation, and the schedules for demonstrating compliance for an existing or new source that has been significantly modified in table 2 of this section.

(2) *Initial startup period.* For up to 3 calendar months after the startup date of your significantly modified existing or new source, you must meet all of the requirements listed in paragraph (a) of this section and table 1 of this section for sources operating under an initial startup period, and the schedules for demonstrating compliance for a significantly modified existing or new source operating under an initial startup period in table 2 of this section. After a maximum of 3 calendar months, your new or existing source must meet all of the requirements listed in Table 1 of this section for sources under normal operation.

(e) *Existing or new sources experiencing a malfunction.* A *malfunction* is defined in §63.2. In general, it means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment or process equipment to function in a usual manner. If your existing or new source experiences an unscheduled shutdown as a result of a malfunction, continues to operate during a malfunction (including the period reasonably necessary to correct the malfunction), or starts up after a shutdown resulting from a malfunction, then you must meet the requirements associated with one of two compliance options. Routine or scheduled process startups and shutdowns resulting from, but not limited to, market demands, maintenance activities, and switching types of oilseed processed, are not startups or shutdowns resulting from a malfunction and, therefore, do not qualify for this provision. Within 15 days of the beginning date of the malfunction, you must choose to comply with one of the options listed in paragraphs (e)(1) through (2) of this section:

(1) *Normal operation.* Your source must meet all of the requirements listed in paragraph (a) of this section and one of the options listed in paragraphs (e)(1)(i) through (iii) of this section:

(i) Existing source normal operation requirements in paragraph (b) of this section.

(ii) New source normal operation requirements in paragraph (c)(1) of this section.

(iii) Normal operation requirements for sources that have been significantly modified in paragraph (d)(1) of this section.

(2) *Malfunction period.* Throughout the malfunction period, you must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section for sources operating during a malfunction period. At the end of the malfunction period, your source must then meet all of the requirements listed in table 1 of this section for sources under normal operation. Table 1 of this section follows:

Table 1 of §63.2850—Requirements for Compliance with HAP Emission Standards

Are you required to . . .	For periods of normal operation?	For initial startup periods subject to §63.2850(c)(2) or (d)(2)?	For malfunction periods subject to §63.2850(e)(2)?

Are you required to . . .	For periods of normal operation?	For initial startup periods subject to §63.2850(c)(2) or (d)(2)?	For malfunction periods subject to §63.2850(e)(2)?
(a) Operate and maintain your source in accordance with general duty provisions of §63.6(e)?	Yes. Additionally, the HAP emission limits will apply.	Yes, you are required to minimize emissions to the extent practible throughout the initial startup period. Such measures should be described in the SSM plan.	Yes, you are required to minimize emissions to the extent practible throughout the initial startup period. Such measures should be described in the SSM plan.
(b) Determine and record the extraction solvent loss in gallons from your source?	Yes, as described in §63.2853	Yes, as described in §63.2862(e)	Yes, as described in §63.2862(e).
(c) Record the volume fraction of HAP present at greater than 1 percent by volume and gallons of extraction solvent in shipment received?	Yes	Yes	Yes.
(d) Determine and record the tons of each oilseed type processed by your source?	Yes, as described in §63.2855	No	No.
(e) Determine the weighted average volume fraction of HAP in extraction solvent received as described in §63.2854 by the end of the following calendar month?	Yes	No. Except for solvent received by a new or reconstructed source commencing operation under an initial startup period, the HAP volume fraction in any solvent received during an initial startup period is included in the weighted average HAP determination for the next operating month	No, the HAP volume fraction in any solvent received during a malfunction period is included in the weighted average HAP determination for the next operating month.
(f) Determine and record the actual solvent loss, weighted average volume fraction HAP, oilseed processed and compliance ratio for each 12 operating month period as described in §63.2840 by the end of the following calendar month?	Yes,	No, these requirements are not applicable because your source is not required to determine the compliance ratio with data recorded for an initial startup period	No, these requirements are not applicable because your source is not required to determine the compliance ratio with data recorded for a malfunction period.
(g) Submit a Notification of Compliance Status or Annual Compliance Certification as appropriate?	Yes, as described in §§63.2860(d) and 63.2861(a)	No. However, you may be required to submit an annual compliance certification for previous operating months, if the deadline for the annual compliance certification	No. However, you may be required to submit an annual compliance certification for previous operating months, if the deadline for the annual

Are you required to . . .	For periods of normal operation?	For initial startup periods subject to §63.2850(c)(2) or (d)(2)?	For malfunction periods subject to §63.2850(e)(2)?
		happens to occur during the initial startup period	compliance certification happens to occur during the malfunction period.
(h) Submit a Deviation Notification Report by the end of the calendar month following the month in which you determined that the compliance ratio exceeds 1.00 as described in §63.2861(b)?	Yes	No, these requirements are not applicable because your source is not required to determine the compliance ratio with data recorded for an initial startup period	No, these requirements are not applicable because your source is not required to determine the compliance ratio with data recorded for a malfunction period.
(i) Submit a Periodic SSM Report as described in §63.2861(c)?	No, a SSM activity is not categorized as normal operation	Yes	Yes.
(j) Submit an Immediate SSM Report as described in §63.2861(d)?	No, a SSM activity is not categorized as normal operation	Yes, only if your source does not follow the SSM plan	Yes, only if your source does not follow the SSM plan.

Table 2 of §63.2850—Schedules for Demonstrating Compliance Under Various Source Operating Modes

If your source is . . .	and is operating under. . .	then your recordkeeping schedule. . .	You must determine your first compliance ratio by the end of the calendar month following. . .	Base your first compliance ratio on information recorded. . .
(a) Existing	Normal operation	Begins on the compliance date	The first 12 operating months after the compliance date	During the first 12 operating months after the compliance date.
(b) New	(1) Normal operation	Begins on the startup date of your new source	The first 12 operating months after the startup date of the new source	During the first 12 operating months after the startup date of the new source.
	(2) An initial startup period	Begins on the startup date of your new source	The first 12 operating months after termination of the initial startup period, which can last for up to 6 months	During the first 12 operating months after the initial startup period, which can last for up to 6 months.
(c) Existing or new that has been significantly	(1) Normal operation	Resumes on the startup date of the modified source	The first operating month after the startup date of the modified source	During the previous 11 operating months prior to the significant modification and the first operating month

modified				following the initial startup date of the source.
	(2) An initial startup period	Resumes on the startup date of the modified source	The first operating month after termination of the initial startup period, which can last up to 3 months	During the 11 operating months before the significant modification and the first operating month after the initial startup period.

[66 FR 19011, Apr. 12, 2001, as amended at 71 FR 20463, Apr. 20, 2006]

§ 63.2851 What is a plan for demonstrating compliance?

(a) You must develop and implement a written plan for demonstrating compliance that provides the detailed procedures you will follow to monitor and record data necessary for demonstrating compliance with this subpart. Procedures followed for quantifying solvent loss from the source and amount of oilseed processed vary from source to source because of site-specific factors such as equipment design characteristics and operating conditions. Typical procedures include one or more accurate measurement methods such as weigh scales, volumetric displacement, and material mass balances. Because the industry does not have a uniform set of procedures, you must develop and implement your own site-specific plan for demonstrating compliance before the compliance date for your source. You must also incorporate the plan for demonstrating compliance by reference in the source's title V permit and keep the plan on-site and readily available as long as the source is operational. If you make any changes to the plan for demonstrating compliance, then you must keep all previous versions of the plan and make them readily available for inspection for at least 5 years after each revision. The plan for demonstrating compliance must include the items in paragraphs (a)(1) through (7) of this section:

(1) The name and address of the owner or operator.

(2) The physical address of the vegetable oil production process.

(3) A detailed description of all methods of measurement your source will use to determine your solvent losses, HAP content of solvent, and the tons of each type of oilseed processed.

(4) When each measurement will be made.

(5) Examples of each calculation you will use to determine your compliance status. Include examples of how you will convert data measured with one parameter to other terms for use in compliance determination.

(6) Example logs of how data will be recorded.

(7) A plan to ensure that the data continue to meet compliance demonstration needs.

(b) The responsible agency of these NESHAP may require you to revise your plan for demonstrating compliance. The responsible agency may require reasonable revisions if the procedures lack detail, are inconsistent or do not accurately determine solvent loss, HAP content of the solvent, or the tons of oilseed processed.

§ 63.2852 What is a startup, shutdown, and malfunction plan?

You must develop a written SSM plan in accordance with §63.6(e)(3). You must complete the SSM plan before the compliance date for your source. You must also keep the SSM plan on-site and readily

available as long as the source is operational. The SSM plan provides detailed procedures for operating and maintaining your source to minimize emissions during a qualifying SSM event for which the source chooses the §63.2850(e)(2) malfunction period, or the §63.2850(c)(2) or (d)(2) initial startup period. The SSM plan must specify a program of corrective action for malfunctioning process and air pollution control equipment and reflect the best practices now in use by the industry to minimize emissions. Some or all of the procedures may come from plans you developed for other purposes such as a Standard Operating Procedure manual or an Occupational Safety and Health Administration Process Safety Management plan. To qualify as a SSM plan, other such plans must meet all the applicable requirements of these NESHAP.

[66 FR 19011, Apr. 12, 2001, as amended at 67 FR 16321, Apr. 5, 2002; 71 FR 20463, Apr. 20, 2006]

§ 63.2853 How do I determine the actual solvent loss?

By the end of each calendar month following an operating month, you must determine the total solvent loss in gallons for the previous operating month. The total solvent loss for an operating month includes all solvent losses that occur during normal operating periods within the operating month. If you have determined solvent losses for 12 or more operating months, then you must also determine the 12 operating months rolling sum of actual solvent loss in gallons by summing the monthly actual solvent loss for the previous 12 operating months. The 12 operating months rolling sum of solvent loss is the “actual solvent loss,” which is used to calculate your compliance ratio as described in §63.2840.

(a) To determine the actual solvent loss from your source, follow the procedures in your plan for demonstrating compliance to determine the items in paragraphs (a)(1) through (7) of this section:

(1) *The dates that define each operating status period during a calendar month.* The dates that define each operating status period include the beginning date of each calendar month and the date of any change in the source operating status. If the source maintains the same operating status during an entire calendar month, these dates are the beginning and ending dates of the calendar month. If, prior to the effective date of this rule, your source determines the solvent loss on an *accounting month,* as defined in §63.2872, rather than a calendar month basis, and you have 12 complete accounting months of approximately equal duration in a calendar year, you may substitute the accounting month time interval for the calendar month time interval. If you choose to use an accounting month rather than a calendar month, you must document this measurement frequency selection in your plan for demonstrating compliance, and you must remain on this schedule unless you request and receive written approval from the agency responsible for these NESHAP.

(2) *Source operating status.* You must categorize the operating status of your source for each recorded time interval in accordance with criteria in Table 1 of this section, as follows:

Table 1 of §63.2853—Categorizing Your Source Operating Status

If during a recorded time interval . . .	then your source operating status is . . .
(i) Your source processes any amount of listed oilseed and source is not operating under an initial startup operating period or a malfunction period subject to §63.2850(c)(2), (d)(2), or (e)(2)	A normal operating period.
(ii) Your source processes no agricultural product and your source is not operating under an initial startup period or malfunction period subject to §63.2850(c)(2), (d)(2), or (e)(2)	A nonoperating period.
(iii) You choose to operate your source under an initial startup period subject to	An initial startup period.

§63.2850(c)(2) or (d)(2)	
(iv) You choose to operate your source under a malfunction period subject to §63.2850(e)(2)	A malfunction period.
(v) Your source processes agricultural products not defined as listed oilseed	An exempt period.

(3) *Measuring the beginning and ending solvent inventory.* You are required to measure and record the solvent inventory on the beginning and ending dates of each normal operating period that occurs during an operating month. An operating month is any calendar month with at least one normal operating period. You must consistently follow the procedures described in your plan for demonstrating compliance, as specified in §63.2851, to determine the extraction solvent inventory, and maintain readily available records of the actual solvent loss inventory, as described in §63.2862(c)(1). In general, you must measure and record the solvent inventory only when the source is actively processing any type of agricultural product. When the source is not active, some or all of the solvent working capacity is transferred to solvent storage tanks which can artificially inflate the solvent inventory.

(4) *Gallons of extraction solvent received.* Record the total gallons of extraction solvent received in each shipment. For most processes, the gallons of solvent received represents purchases of delivered solvent added to the solvent storage inventory. However, if your process refines additional vegetable oil from off-site sources, recovers solvent from the off-site oil, and adds it to the on-site solvent inventory, then you must determine the quantity of recovered solvent and include it in the gallons of extraction solvent received.

(5) *Solvent inventory adjustments.* In some situations, solvent losses determined directly from the measured solvent inventory and quantity of solvent received is not an accurate estimate of the “actual solvent loss” for use in determining compliance ratios. In such cases, you may adjust the total solvent loss for each normal operating period as long as you provide a reasonable justification for the adjustment. Situations that may require adjustments of the total solvent loss include, but are not limited to, situations in paragraphs (a)(5)(i) and (ii) of this section:

(i) *Solvent destroyed in a control device.* You may use a control device to reduce solvent emissions to meet the emission standard. The use of a control device does not alter the emission limit for the source. If you use a control device that reduces solvent emissions through destruction of the solvent instead of recovery, then determine the gallons of solvent that enter the control device and are destroyed there during each normal operating period. All solvent destroyed in a control device during a normal operating period can be subtracted from the total solvent loss. Examples of destructive emission control devices include catalytic incinerators, boilers, or flares. Identify and describe, in your plan for demonstrating compliance, each type of reasonable and sound measurement method that you use to quantify the gallons of solvent entering and exiting the control device and to determine the destruction efficiency of the control device. You may use design evaluations to document the gallons of solvent destroyed or removed by the control device instead of performance testing under §63.7. The design evaluations must be based on the procedures and options described in §63.985(b)(1)(i)(A) through (C) or §63.11, as appropriate. All data, assumptions, and procedures used in such evaluations must be documented and available for inspection. If you use performance testing to determine solvent flow rate to the control device or destruction efficiency of the device, follow the procedures as outlined in §63.997(e)(1) and (2). Instead of periodic performance testing to demonstrate continued good operation of the control device, you may develop a monitoring plan, following the procedures outlined in §63.988(c) and using operational parametric measurement devices such as fan parameters, percent measurements of lower explosive limits, and combustion temperature.

(ii) Changes in solvent working capacity. In records you keep on-site, document any process modifications resulting in changes to the solvent working capacity in your vegetable oil production process. *Solvent working capacity* is defined in §63.2872. In general, solvent working capacity is the

volume of solvent normally retained in solvent recovery equipment such as the extractor, desolventizer-toaster, solvent storage, working tanks, mineral oil absorber, condensers, and oil/solvent distillation system. If the change occurs during a normal operating period, you must determine the difference in working solvent volume and make a one-time documented adjustment to the solvent inventory.

(b) Use Equation 1 of this section to determine the actual solvent loss occurring from your affected source for all normal operating periods recorded within a calendar month. Equation 1 of this section follows:

$$\text{Monthly Actual Solvent (gal)} = \sum_{i=1}^{n} \left(SOLV_B - SOLV_E + SOLV_R \pm SOLV_A \right)_i \qquad (Eq.\ 1)$$

Where:

$SOLV_B$= Gallons of solvent in the inventory at the beginning of normal operating period “i” as determined in paragraph (a)(3) of this section.

$SOLV_E$= Gallons of solvent in the inventory at the end of normal operating period “i” as determined in paragraph (a)(3) of this section.

$SOLV_R$= Gallons of solvent received between the beginning and ending inventory dates of normal operating period “i” as determined in paragraph (a)(4) of this section.

$SOLV_A$= Gallons of solvent added or removed from the extraction solvent inventory during normal operating period “i” as determined in paragraph (a)(5) of this section.

n = Number of normal operating periods in a calendar month.

(c) The actual solvent loss is the total solvent losses during normal operating periods for the previous 12 operating months. You determine your actual solvent loss by summing the monthly actual solvent losses for the previous 12 operating months. You must record the actual solvent loss by the end of each calendar month following an operating month. Use the actual solvent loss in Equation 2 of §63.2840 to determine the compliance ratio. Actual solvent loss does not include losses that occur during operating status periods listed in paragraphs (c)(1) through (4) of this section. If any one of these four operating status periods span an entire month, then the month is treated as nonoperating and there is no compliance ratio determination.

(1) Nonoperating periods as described in paragraph (a)(2)(ii) of this section.

(2) Initial startup periods as described in §63.2850(c)(2) or (d)(2).

(3) Malfunction periods as described in §63.2850(e)(2).

(4) Exempt operation periods as described in paragraph (a)(2)(v) of this section.

§ 63.2854 How do I determine the weighted average volume fraction of HAP in the actual solvent loss?

(a) This section describes the information and procedures you must use to determine the weighted average volume fraction of HAP in extraction solvent received for use in your vegetable oil production process. By the end of each calendar month following an operating month, determine the weighted

average volume fraction of HAP in extraction solvent received since the end of the previous operating month. If you have determined the monthly weighted average volume fraction of HAP in solvent received for 12 or more operating months, then also determine an overall weighted average volume fraction of HAP in solvent received for the previous 12 operating months. Use the volume fraction of HAP determined as a 12 operating months weighted average in Equation 2 of §63.2840 to determine the compliance ratio.

(b) To determine the volume fraction of HAP in the extraction solvent determined as a 12 operating months weighted average, you must comply with paragraphs (b)(1) through (3) of this section:

(1) Record the volume fraction of each HAP comprising more than 1 percent by volume of the solvent in each delivery of solvent, including solvent recovered from off-site oil. To determine the HAP content of the material in each delivery of solvent, the reference method is EPA Method 311 of appendix A of this part. You may use EPA Method 311, an approved alternative method, or any other reasonable means for determining the HAP content. Other reasonable means of determining HAP content include, but are not limited to, a material safety data sheet or a manufacturer's certificate of analysis. A certificate of analysis is a legal and binding document provided by a solvent manufacturer. The purpose of a certificate of analysis is to list the test methods and analytical results that determine chemical properties of the solvent and the volume percentage of all HAP components present in the solvent at quantities greater than 1 percent by volume. You are not required to test the materials that you use, but the Administrator may require a test using EPA Method 311 (or an approved alternative method) to confirm the reported HAP content. However, if the results of an analysis by EPA Method 311 are different from the HAP content determined by another means, the EPA Method 311 results will govern compliance determinations.

(2) Determine the weighted average volume fraction of HAP in the extraction solvent each operating month. The weighted average volume fraction of HAP for an operating month includes all solvent received since the end of the last operating month, regardless of the operating status at the time of the delivery. Determine the monthly weighted average volume fraction of HAP by summing the products of the HAP volume fraction of each delivery and the volume of each delivery and dividing the sum by the total volume of all deliveries as expressed in Equation 1 of this section. Record the result by the end of each calendar month following an operating month. Equation 1 of this section follows:

$$\begin{array}{c}\text{Monthly Weighted}\\ \textit{Average}\text{ HAP Content}\\ \text{of Extraction Solvent}\\ \text{(volume fraction)}\end{array} = \frac{\sum_{i=1}^{n}\left(\text{Received}_i * \textit{Content}_i\right)}{\textit{Total}\text{ Received}} \qquad (\textit{Eq. } 1)$$

Where:

Received_i= Gallons of extraction solvent received in delivery “i.”

Content_i= The volume fraction of HAP in extraction solvent delivery “i.”

Total Received = Total gallons of extraction solvent received since the end of the previous operating month.

n = Number of extraction solvent deliveries since the end of the previous operating month.

(3) Determine the volume fraction of HAP in your extraction solvent as a 12 operating months weighted average. When your source has processed oilseed for 12 operating months, sum the products of the monthly weighted average HAP volume fraction and corresponding volume of solvent received, and divide the sum by the total volume of solvent received for the 12 operating months, as expressed by

Equation 2 of this section. Record the result by the end of each calendar month following an operating month and use it in Equation 2 of §63.2840 to determine the compliance ratio. Equation 2 of this section follows:

$$\begin{array}{c}\text{12-Month Weighted}\\ \textit{Average}\text{ of HAP Content}\\ \text{in Solvent Received}\\ \text{(volume fraction)}\end{array} = \frac{\sum_{i=1}^{12}(\text{Received}_i * \textit{Content}_i)}{\textit{Total}\text{ Received}} \qquad (\textit{Eq. } 2)$$

Where:

Received_i= Gallons of extraction solvent received in operating month “i” as determined in accordance with §63.2853(a)(4).

Content_i= Average volume fraction of HAP in extraction solvent received in operating month “i” as determined in accordance with paragraph (b)(1) of this section.

Total Received = Total gallons of extraction solvent received during the previous 12 operating months.

§ 63.2855 How do I determine the quantity of oilseed processed?

All oilseed measurements must be determined on an *as received* basis, as defined in §63.2872. The as received basis refers to the oilseed chemical and physical characteristics as initially received by the source and prior to any oilseed handling and processing. By the end of each calendar month following an operating month, you must determine the tons as received of each listed oilseed processed for the operating month. The total oilseed processed for an operating month includes the total of each oilseed processed during all normal operating periods that occur within the operating month. If you have determined the tons of oilseed processed for 12 or more operating months, then you must also determine the 12 operating months rolling sum of each type oilseed processed by summing the tons of each type of oilseed processed for the previous 12 operating months. The 12 operating months rolling sum of each type of oilseed processed is used to calculate the compliance ratio as described in §63.2840.

(a) To determine the tons as received of each type of oilseed processed at your source, follow the procedures in your plan for demonstrating compliance to determine the items in paragraphs (a)(1) through (5) of this section:

(1) *The dates that define each operating status period.* The dates that define each operating status period include the beginning date of each calendar month and the date of any change in the source operating status. If, prior to the effective date of this rule, your source determines the oilseed inventory on an accounting month rather than a calendar month basis, and you have 12 complete accounting months of approximately equal duration in a calendar year, you may substitute the accounting month time interval for the calendar month time interval. If you choose to use an accounting month rather than a calendar month, you must document this measurement frequency selection in your plan for demonstrating compliance, and you must remain on this schedule unless you request and receive written approval from the agency responsible for these NESHAP. The dates on each oilseed inventory log must be consistent with the dates recorded for the solvent inventory.

(2) *Source operating status.* You must categorize the source operation for each recorded time interval. The source operating status for each time interval recorded on the oilseed inventory for each type of oilseed must be consistent with the operating status recorded on the solvent inventory logs as described in §63.2853(a)(2).

(3) *Measuring the beginning and ending inventory for each oilseed.* You are required to measure and record the oilseed inventory on the beginning and ending dates of each normal operating period that occurs during an operating month. An operating month is any calendar month with at least one normal operating period. You must consistently follow the procedures described in your plan for demonstrating compliance, as specified in §63.2851, to determine the oilseed inventory on an as received basis and maintain readily available records of the oilseed inventory as described by §63.2862(c)(3).

(4) *Tons of each oilseed received.* Record the type of oilseed and tons of each shipment of oilseed received and added to your on-site storage.

(5) *Oilseed inventory adjustments.* In some situations, determining the quantity of oilseed processed directly from the measured oilseed inventory and quantity of oilseed received is not an accurate estimate of the tons of oilseed processed for use in determining compliance ratios. For example, spoiled and molded oilseed removed from storage but not processed by your source will result in an overestimate of the quantity of oilseed processed. In such cases, you must adjust the oilseed inventory and provide a justification for the adjustment. Situations that may require oilseed inventory adjustments include, but are not limited to, the situations listed in paragraphs (a)(5)(i) through (v) of this section:

(i) Oilseed that mold or otherwise become unsuitable for processing.

(ii) Oilseed you sell before it enters the processing operation.

(iii) Oilseed destroyed by an event such as a process malfunction, fire, or natural disaster.

(iv) Oilseed processed through operations prior to solvent extraction such as screening, dehulling, cracking, drying, and conditioning; but that are not routed to the solvent extractor for further processing.

(v) Periodic physical measurements of inventory. For example, some sources periodically empty oilseed storage silos to physically measure the current oilseed inventory. This periodic measurement procedure typically results in a small inventory correction. The correction factor, usually less than 1 percent, may be used to make an adjustment to the source's oilseed inventory that was estimated previously with indirect measurement techniques. To make this adjustment, your plan for demonstrating compliance must provide for such an adjustment.

(b) Use Equation 1 of this section to determine the quantity of each oilseed type processed at your affected source during normal operating periods recorded within a calendar month. Equation 1 of this section follows:

$$\begin{array}{l}\text{Monthly Quantity}\\ \text{of Each Oilseed}\\ \text{Processed (tons)}\end{array} = \sum_{n=1}^{N}\left(SEED_B - SEED_E + SEED_R \pm SEED_A\right) \qquad (Eq.\ 1)$$

Where:

$SEED_B$= Tons of oilseed in the inventory at the beginning of normal operating period “i” as determined in accordance with paragraph (a)(3) of this section.

$SEED_E$= Tons of oilseed in the inventory at the end of normal operating period “i” as determined in accordance with paragraph (a)(3) of this section.

$SEED_R$= Tons of oilseed received during normal operating period “i” as determined in accordance with paragraph (a)(4) of this section.

$SEED_A$= Tons of oilseed added or removed from the oilseed inventory during normal operating period “i” as determined in accordance with paragraph (a)(5) of this section.

n = Number of normal operating periods in the calendar month during which this type oilseed was processed.

(c) The quantity of each oilseed processed is the total tons of each type of listed oilseed processed during normal operating periods in the previous 12 operating months. You determine the tons of each oilseed processed by summing the monthly quantity of each oilseed processed for the previous 12 operating months. You must record the 12 operating months quantity of each type of oilseed processed by the end of each calendar month following an operating month. Use the 12 operating months quantity of each type of oilseed processed to determine the compliance ratio as described in §63.2840. The quantity of oilseed processed does not include oilseed processed during the operating status periods in paragraphs (c)(1) through (4) of this section:

(1) Nonoperating periods as described in §63.2853 (a)(2)(ii).

(2) Initial startup periods as described in §63.2850(c)(2) or (d)(2).

(3) Malfunction periods as described in §63.2850(e)(2).

(4) Exempt operation periods as described in §63.2853 (a)(2)(v).

(5) If any one of these four operating status periods span an entire calendar month, then the calendar month is treated as a nonoperating month and there is no compliance ratio determination.

Notifications, Reports, and Records

§ 63.2860 What notifications must I submit and when?

You must submit the one-time notifications listed in paragraphs (a) through (d) of this section to the responsible agency:

(a) *Initial notification for existing sources.* For an existing source, submit an initial notification to the agency responsible for these NESHAP no later than 120 days after the effective date of this subpart. In the notification, include the items in paragraphs (a)(1) through (5) of this section:

(1) The name and address of the owner or operator.

(2) The physical address of the vegetable oil production process.

(3) Identification of the relevant standard, such as the vegetable oil production NESHAP, and compliance date.

(4) A brief description of the source including the types of listed oilseeds processed, nominal operating capacity, and type of desolventizer(s) used.

(5) A statement designating the source as a major source of HAP or a demonstration that the source meets the definition of an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.

(b) *Initial notifications for new and reconstructed sources.* New or reconstructed sources must submit a series of notifications before, during, and after source construction per the schedule listed in §63.9. The information requirements for the notifications are the same as those listed in the General Provisions with the exceptions listed in paragraphs (b)(1) and (2) of this section:

(1) The application for approval of construction does not require the specific HAP emission data required in §63.5(d)(1)(ii)(H) and (iii), (d)(2) and (d)(3)(ii). The application for approval of construction would include, instead, a brief description of the source including the types of listed oilseeds processed, nominal operating capacity, and type of desolventizer(s) used.

(2) The notification of actual startup date must also include whether you have elected to operate under an initial startup period subject to §63.2850(c)(2) and provide an estimate and justification for the anticipated duration of the initial startup period.

(c) *Significant modification notifications.* Any existing or new source that plans to undergo a significant modification as defined in §63.2872 must submit two reports as described in paragraphs (c)(1) and (2) of this section:

(1) Initial notification. You must submit an initial notification to the agency responsible for these NESHAP 30 days prior to initial startup of the significantly modified source. The initial notification must demonstrate that the proposed changes qualify as a significant modification. The initial notification must include the items in paragraphs (c)(1)(i) and (ii) of this section:

(i) The expected startup date of the modified source.

(ii) A description of the significant modification including a list of the equipment that will be replaced or modified. If the significant modification involves changes other than adding or replacing extractors, desolventizer-toasters (conventional and specialty), and meal dryer-coolers, then you must also include the fixed capital cost of the new components, expressed as a percentage of the fixed capital cost to build a comparable new vegetable oil production process; supporting documentation for the cost estimate; and documentation that the proposed changes will significantly affect solvent losses.

(2) Notification of actual startup. You must submit a notification of actual startup date within 15 days after initial startup of the modified source. The notification must include the items in paragraphs (c)(2)(i) through (iv) of this section:

(i) The initial startup date of the modified source.

(ii) An indication whether you have elected to operate under an initial startup period subject to §63.2850(d)(2).

(iii) The anticipated duration of any initial startup period.

(iv) A justification for the anticipated duration of any initial startup period.

(d) *Notification of compliance status.* As an existing, new, or reconstructed source, you must submit a notification of compliance status report to the responsible agency no later than 60 days after determining your initial 12 operating months compliance ratio. If you are an existing source, you generally must submit this notification no later than 50 calendar months after the effective date of these NESHAP (36 calendar

months for compliance, 12 operating months to record data, and 2 calendar months to complete the report). If you are a new or reconstructed source, the notification of compliance status is generally due no later than 20 calendar months after initial startup (6 calendar months for the initial startup period, 12 operating months to record data, and 2 calendar months to complete the report). The notification of compliance status must contain the items in paragraphs (d)(1) through (6) of this section:

(1) The name and address of the owner or operator.

(2) The physical address of the vegetable oil production process.

(3) Each listed oilseed type processed during the previous 12 operating months.

(4) Each HAP identified under §63.2854(a) as being present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12 operating months period used for the initial compliance determination.

(5) A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.

(6) A compliance certification indicating whether the source complied with all of the requirements of this subpart throughout the 12 operating months used for the initial source compliance determination. This certification must include a certification of the items in paragraphs (d)(6)(i) through (iii) of this section:

(i) The plan for demonstrating compliance (as described in §63.2851) and SSM plan (as described in §63.2852) are complete and available on-site for inspection.

(ii) You are following the procedures described in the plan for demonstrating compliance.

(iii) The compliance ratio is less than or equal to 1.00.

§ 63.2861 What reports must I submit and when?

After the initial notifications, you must submit the reports in paragraphs (a) through (d) of this section to the agency responsible for these NESHAP at the appropriate time intervals:

(a) *Annual compliance certifications.* The first annual compliance certification is due 12 calendar months after you submit the notification of compliance status. Each subsequent annual compliance certification is due 12 calendar months after the previous annual compliance certification. The annual compliance certification provides the compliance status for each operating month during the 12 calendar months period ending 60 days prior to the date on which the report is due. Include the information in paragraphs (a)(1) through (6) of this section in the annual certification:

(1) The name and address of the owner or operator.

(2) The physical address of the vegetable oil production process.

(3) Each listed oilseed type processed during the 12 calendar months period covered by the report.

(4) Each HAP identified under §63.2854(a) as being present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12 calendar months period covered by the report.

(5) A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.

(6) A compliance certification to indicate whether the source was in compliance for each compliance determination made during the 12 calendar months period covered by the report. For each such compliance determination, you must include a certification of the items in paragraphs (a)(6)(i) through (ii) of this section:

(i) You are following the procedures described in the plan for demonstrating compliance.

(ii) The compliance ratio is less than or equal to 1.00.

(b) *Deviation notification report.* Submit a deviation report for each compliance determination you make in which the compliance ratio exceeds 1.00 as determined under §63.2840(c). Submit the deviation report by the end of the month following the calendar month in which you determined the deviation. The deviation notification report must include the items in paragraphs (b)(1) through (4) of this section:

(1) The name and address of the owner or operator.

(2) The physical address of the vegetable oil production process.

(3) Each listed oilseed type processed during the 12 operating months period for which you determined the deviation.

(4) The compliance ratio comprising the deviation. You may reduce the frequency of submittal of the deviation notification report if the agency responsible for these NESHAP does not object as provided in §63.10(e)(3)(iii).

(c) *Periodic startup, shutdown, and malfunction report.* If you choose to operate your source under an initial startup period subject to §63.2850(c)(2) or (d)(2) or a malfunction period subject to §63.2850(e)(2), you must submit a periodic SSM report by the end of the calendar month following each month in which the initial startup period or malfunction period occurred. The periodic SSM report must include the items in paragraphs (c)(1) through (3) of this section:

(1) The name, title, and signature of a source's responsible official who is certifying that the report accurately states that all actions taken during the initial startup or malfunction period were consistent with the SSM plan.

(2) A description of events occurring during the time period, the date and duration of the events, and reason the time interval qualifies as an initial startup period or malfunction period.

(3) An estimate of the solvent loss during the initial startup or malfunction period with supporting documentation.

(d) *Immediate SSM reports.* If you handle a SSM during an initial startup period subject to §63.2850(c)(2) or (d)(2) or a malfunction period subject to §63.2850(e)(2) differently from procedures in the SSM plan and the relevant emission requirements in §63.2840 are exceeded, then you must submit an immediate SSM report. Immediate SSM reports consist of a telephone call or facsimile transmission to the responsible agency within 2 working days after starting actions inconsistent with the SSM plan, followed by a letter within 7 working days after the end of the event. The letter must include the items in paragraphs (d)(1) through (3) of this section:

(1) The name, title, and signature of a source's responsible official who is certifying the accuracy of the report, an explanation of the event, and the reasons for not following the SSM plan.

(2) A description and date of the SSM event, its duration, and reason it qualifies as a SSM.

(3) An estimate of the solvent loss for the duration of the SSM event with supporting documentation.

[66 FR 19011, Apr. 12, 2001, as amended at 67 FR 16321, Apr. 5, 2002]

§ 63.2862 What records must I keep?

(a) You must satisfy the recordkeeping requirements of this section by the compliance date for your source specified in Table 1 of §63.2834.

(b) Prepare a plan for demonstrating compliance (as described in §63.2851) and a SSM plan (as described in §63.2852). In these two plans, describe the procedures you will follow in obtaining and recording data, and determining compliance under normal operations or a SSM subject to the §63.2850(c)(2) or (d)(2) initial startup period or the §63.2850(e)(2) malfunction period. Complete both plans before the compliance date for your source and keep them on-site and readily available as long as the source is operational.

(c) If your source processes any listed oilseed, record the items in paragraphs (c)(1) through (5) of this section:

(1) For the solvent inventory, record the information in paragraphs (c)(1)(i) through (vii) of this section in accordance with your plan for demonstrating compliance:

(i) Dates that define each operating status period during a calendar month.

(ii) The operating status of your source such as normal operation, nonoperating, initial startup period, malfunction period, or exempt operation for each recorded time interval.

(iii) Record the gallons of extraction solvent in the inventory on the beginning and ending dates of each normal operating period.

(iv) The gallons of all extraction solvent received, purchased, and recovered during each calendar month.

(v) All extraction solvent inventory adjustments, additions or subtractions. You must document the reason for the adjustment and justify the quantity of the adjustment.

(vi) The total solvent loss for each calendar month, regardless of the source operating status.

(vii) The actual solvent loss in gallons for each operating month.

(2) For the weighted average volume fraction of HAP in the extraction solvent, you must record the items in paragraphs (c)(2)(i) through (iii) of this section:

(i) The gallons of extraction solvent received in each delivery.

(ii) The volume fraction of each HAP exceeding 1 percent by volume in each delivery of extraction solvent.

(iii) The weighted average volume fraction of HAP in extraction solvent received since the end of the last operating month as determined in accordance with §63.2854(b)(2).

(3) For each type of listed oilseed processed, record the items in paragraphs (c)(3)(i) through (vi) of this section, in accordance with your plan for demonstrating compliance:

(i) The dates that define each operating status period. These dates must be the same as the dates entered for the extraction solvent inventory.

(ii) The operating status of your source such as normal operation, nonoperating, initial startup period, malfunction period, or exempt operation for each recorded time interval. On the log for each type of listed oilseed that is not being processed during a normal operating period, you must record which type of listed oilseed is being processed in addition to the source operating status.

(iii) The oilseed inventory for the type of listed oilseed being processed on the beginning and ending dates of each normal operating period.

(iv) The tons of each type of listed oilseed received at the affected source each normal operating period.

(v) All listed oilseed inventory adjustments, additions or subtractions for normal operating periods. You must document the reason for the adjustment and justify the quantity of the adjustment.

(vi) The tons of each type of listed oilseed processed during each operating month.

(d) After your source has processed listed oilseed for 12 operating months, and you are not operating during an initial startup period as described in §63.2850(c)(2) or (d)(2), or a malfunction period as described in §63.2850(e)(2), record the items in paragraphs (d)(1) through (5) of this section by the end of the calendar month following each operating month:

(1) The 12 operating months rolling sum of the actual solvent loss in gallons as described in §63.2853(c).

(2) The weighted average volume fraction of HAP in extraction solvent received for the previous 12 operating months as described in §63.2854(b)(3).

(3) The 12 operating months rolling sum of each type of listed oilseed processed at the affected source in tons as described in §63.2855(c).

(4) A determination of the compliance ratio. Using the values from §§63.2853, 63.2854, 63.2855, and Table 1 of §63.2840, calculate the compliance ratio using Equation 2 of §63.2840.

(5) A statement of whether the source is in compliance with all of the requirements of this subpart. This includes a determination of whether you have met all of the applicable requirements in §63.2850.

(e) For each SSM event subject to an initial startup period as described in §63.2850(c)(2) or (d)(2), or a malfunction period as described in §63.2850(e)(2), record the items in paragraphs (e)(1) through (3) of this section by the end of the calendar month following each month in which the initial startup period or malfunction period occurred:

(1) A description and date of the SSM event, its duration, and reason it qualifies as an initial startup or malfunction.

(2) An estimate of the solvent loss in gallons for the duration of the initial startup or malfunction period with supporting documentation.

(3) A checklist or other mechanism to indicate whether the SSM plan was followed during the initial startup or malfunction period.

§ 63.2863 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for review in accordance with §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, in accordance with §3.10(b)(1). You can keep the records off-site for the remaining 3 years.

Other Requirements and Information

§ 63.2870 What parts of the General Provisions apply to me?

Table 1 of this section shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. Table 1 of §63.2870 follows:

Table 1 of §63.2870—Applicability of 40 CFR Part 63, Subpart A, to 40 CFR, Part 63, Subpart GGGG

General provisions citation	Subject of citation	Brief description of requirement	Applies to subpart	Explanation
§63.1	Applicability	Initial applicability determination; applicability after standard established; permit requirements; extensions; notifications	Yes	
§63.2	Definitions	Definitions for part 63 standards	Yes	Except as specifically provided in this subpart.
§63.3	Units and abbreviations	Units and abbreviations for part 63 standards	Yes	
§63.4	Prohibited activities and circumvention	Prohibited activities; compliance date; circumvention; severability	Yes	
§63.5	Construction/reconstruction	Applicability; applications; approvals	Yes	Except for subsections of §63.5 as listed below.

General provisions citation	Subject of citation	Brief description of requirement	Applies to subpart	Explanation
§63.5(c)	[Reserved]			
§63.5(d)(1)(ii)(H)	Application for approval	Type and quantity of HAP, operating parameters	No	All sources emit HAP. Subpart GGGG does not require control from specific emission points.
§63.5(d)(1)(ii)(I)	[Reserved]			
§63.5(d)(1)(iii), (d)(2), (d)(3)(ii)		Application for approval	No	The requirements of the application for approval for new, reconstructed and significantly modified sources are described in §63.2860(b) and (c) of subpart GGGG. General provision requirements for identification of HAP emission points or estimates of actual emissions are not required. Descriptions of control and methods, and the estimated and actual control efficiency of such do not apply. Requirements for describing control equipment and the estimated and actual control efficiency of such equipment apply only to control equipment to which the subpart GGGG requirements for quantifying.
§63.6	Applicability of General Provisions	Applicability	Yes	Except for subsections of §63.6 as listed below.
§63.6(b)(1)–(3)	Compliance dates, new and reconstructed sources		No	Section 63.2834 of subpart GGGG specifies the compliance dates for new and reconstructed sources.
§63.6(b)(6)	[Reserved]			
§63.6(c)(3)–(4)	[Reserved]			
§63.6(d)	[Reserved]			
§63.6(e)(1) through (e)(3)(ii) and §63.6(e)(3)(v)	Operation and maintenance requirements		Yes	Minimize emissions to the extent practical.

General provisions citation	Subject of citation	Brief description of requirement	Applies to subpart	Explanation
through (vii)				
§63.6(e)(3)(iii)	Operation and maintenance requirements		No	Minimize emissions to the extent practical
§63.6(e)(3)(iv)	Operation and maintenance requirements		No	Report SSM and in accordance with §63.2861(c) and (d).
§63.6(e)(3)(viii)	Operation and maintenance requirements		Yes	Except, report each revision to your SSM plan in accordance with §63.2861(c) rather than §63.10(d)(5) as required under §63.6(e)(3) (viii).
§63.6(e)(3)(ix)	Title V permit		Yes	
§63.6(f)–(g)	Compliance with nonopacity emission standards except during SSM	Comply with emission standards at all times except during SSM	No	Subpart GGGG does not have nonopacity requirements.
§63.6(h)	Opacity/Visible emission (VE) standards		No	Subpart GGGG has no opacity or VE standards.
§63.6(i)	Compliance extension	Procedures and criteria for responsible agency to grant compliance extension	Yes	
§63.6(j)	Presidential compliance exemption	President may exempt source category from requirement to comply with subpart	Yes	
§63.7	Performance testing requirements	Schedule, conditions, notifications and procedures	Yes	Subpart GGGG requires performance testing only if the source applies additional control that destroys solvent. Section 63.2850(a)(6) requires sources to follow the performance testing guidelines of the General Provisions if a control is added.
§63.8	Monitoring requirements		No	Subpart GGGG does not require monitoring other than as specified therein.
§63.9	Notification requirements	Applicability and state delegation	Yes	Except for subsections of §63.9 as listed below.

General provisions citation	Subject of citation	Brief description of requirement	Applies to subpart	Explanation
§63.9(b)(2)	Notification requirements	Initial notification requirements for existing sources	No	Section 63.2860(a) of subpart GGGG specifies the requirements of the initial notification for existing sources.
§63.9(b)(3)–(5)	Notification requirements	Notification requirement for certain new/reconstructed sources	Yes	Except the information requirements differ as described in §63.2860(b) of subpart GGGG.
§63.9(e)	Notification of performance test	Notify responsible agency 60 days ahead	Yes	Applies only if performance testing is performed.
§63.9(f)	Notification of VE/opacity observations	Notify responsible agency 30 days ahead	No	Subpart GGGG has no opacity or VE standards.
§63.9(g)	Additional notifications when using a continuous monitoring system (CMS)	Notification of performance evaluation; Notification using COMS data; notification that exceeded criterion for relative accuracy	No	Subpart GGGG has no CMS requirements.
§63.9(h)	Notification of compliance status	Contents	No	Section 63.2860(d) of subpart GGGG specifies requirements for the notification of compliance status.
§63.10	Recordkeeping/reporting	Schedule for reporting, record storage	Yes	Except for subsections of §63.10 as listed below.
§63.10(b)(2)(i)	Recordkeeping	Record SSM event	Yes	Applicable to periods when sources must implement their SSM plan as specified in subpart GGGG.
§63.10(b)(2)(ii)–(iii)	Recordkeeping	Malfunction of air pollution equipment	No	Applies only if air pollution control equipment has been added to the process and is necessary for the source to meet the emission limit.
§63.10(b)(2)(vi)	Recordkeeping	CMS recordkeeping	No	Subpart GGGG has no CMS requirements.

General provisions citation	Subject of citation	Brief description of requirement	Applies to subpart	Explanation
§63.10(b)(2)(viii)–(ix)	Recordkeeping	Conditions of performance test	Yes	Applies only if performance tests are performed. Subpart GGGG does not have any CMS opacity or VE observation requirements.
§63.10(b)(2)(x)–(xii)	Recordkeeping	CMS, performance testing, and opacity and VE observations recordkeeping	No	Subpart GGGG does not require CMS.
§63.10(c)	Recordkeeping	Additional CMS recordkeeping	No	Subpart GGGG does not require CMS.
§63.10(d)(2)	Reporting	Reporting performance test results	Yes	Applies only if performance testing is performed.
§63.10(d)(3)	Reporting	Reporting opacity or VE observations	No	Subpart GGGG has no opacity or VE standards.
§63.10(d)(4)	Reporting	Progress reports	Yes	Applies only if a condition of compliance extension exists.
§63.10(d)(5)	Reporting	SSM reporting	No	Section 63.2861(c) and (d) specify SSM reporting requirements.
§63.10(e)	Reporting	Additional CMS reports	No	Subpart GGGG does not require CMS.
§63.11	Control device requirements	Requirements for flares	Yes	Applies only if your source uses a flare to control solvent emissions. Subpart GGGG does not require flares.
§63.12	State authority and delegations	State authority to enforce standards	Yes	
§63.13	State/regional addresses	Addresses where reports, notifications, and requests are sent	Yes	
§63.14	Incorporation by reference	Test methods incorporated by reference	Yes	
§63.15	Availability of information and confidentiality	Public and confidential information	Yes	

[66 FR 19011, Apr. 12, 2001, as amended at 67 FR 16321, Apr. 5, 2002; 71 FR 20463, Apr. 20, 2006]

§ 63.2871 Who implements and enforces this subpart?

(a) This subpart can be implemented by us, the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency, as well as the U.S. EPA, has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under section 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are as follows:

(1) Approval of alternative nonopacity emissions standards under §63.6(g).

(2) Approval of alternative opacity standards under §63.6(h)(9).

(3) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(4) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(5) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

§ 63.2872 What definitions apply to this subpart?

Terms used in this subpart are defined in the sources listed:

(a) The Clean Air Act, section 112(a).

(b) In 40 CFR 63.2, the NESHAP General Provisions.

(c) In this section as follows:

Accounting month means a time interval defined by a business firm during which corporate economic and financial factors are determined on a consistent and regular basis. An accounting month will consist of approximately 4 to 5 calendar weeks and each accounting month will be of approximate equal duration. An accounting month may not correspond exactly to a calendar month, but 12 accounting months will correspond exactly to a calendar year.

Actual solvent loss means the gallons of solvent lost from a source during 12 operating months as determined in accordance with §63.2853.

Agricultural product means any commercially grown plant or plant product.

Allowable HAP loss means the gallons of HAP that would have been lost from a source if the source was operating at the solvent loss factor for each listed oilseed type. The allowable HAP loss in gallons is determined by multiplying the tons of each oilseed type processed during the previous 12 operating

months, as determined in accordance with §63.2855, by the corresponding oilseed solvent loss factor (gal/ton) listed in Table 1 of §63.2840, and by the dimensionless constant 0.64, and summing the result for all oilseed types processed.

Area source means any source that does not meet the major source definition.

As received is the basis upon which all oilseed measurements must be determined and refers to the oilseed chemical and physical characteristics as initially received by the source and prior to any oilseed handling and processing.

Batch operation means any process that operates in a manner where the addition of raw material and withdrawal of product do not occur simultaneously. Typically, raw material is added to a process, operational steps occur, and a product is removed from the process. More raw material is then added to the process and the cycle repeats.

Calendar month means 1 month as specified in a calendar.

Compliance date means the date on which monthly compliance recordkeeping begins. For existing sources, recordkeeping typically begins 3 years after the effective date of the subpart. For new and reconstructed sources, recordkeeping typically begins upon initial startup, except as noted in §63.2834.

Compliance ratio means a ratio of the actual HAP loss in gallons from the previous 12 operating months to an allowable HAP loss in gallons, which is determined by using oilseed solvent loss factors in Table 1 of §63.2840, the weighted average volume fraction of HAP in solvent received for the previous 12 operating months, and the tons of each type of listed oilseed processed in the previous 12 operating months. Months during which no listed oilseed is processed, or months during which the §63.2850(c)(2) or (d)(2) initial startup period or the §63.2850(e)(2) malfunction period applies, are excluded from this calculation. Equation 2 of §63.2840 is used to calculate this value. If the value is less than or equal to 1.00, the source is in compliance. If the value is greater than 1.00, the source is deviating from compliance.

Continuous operation means any process that adds raw material and withdraws product simultaneously. Mass, temperature, concentration and other properties typically approach steady-state conditions.

Conventional desolventizer means a desolventizer toaster that operates with indirect and direct-contact steam to remove solvent from the extracted meal. Oilseeds processed in a conventional desolventizer produce crude vegetable oil and crude meal products, such as animal feed.

Corn germ dry milling means a source that processes corn germ that has been separated from the other corn components using a “dry” process of mechanical chafing and air sifting.

Corn germ wet milling means a source that processes corn germ that has been separated from other corn components using a “wet” process of centrifuging a slurry steeped in a dilute sulfurous acid solution.

Exempt period means a period of time during which a source processes agricultural products not defined as listed oilseed.

Extraction solvent means an organic chemical medium used to remove oil from an oilseed. Typically, the extraction solvent is a commercial grade of hexane isomers which have an approximate HAP content of 64 percent by volume.

Hazardous air pollutant (HAP) means any substance or mixture of substances listed as a hazardous air pollutant under section 112(b) of the Clean Air Act, as of April 12, 2001.

Initial startup date means the first calendar day that a new, reconstructed or significantly modified source processes any listed oilseed.

Initial startup period means a period of time from the initial startup date of a new, reconstructed or significantly modified source, for which you choose to operate the source under an initial startup period subject to §63.2850(c)(2) or (d)(2). During an initial startup period, a source complies with the standards by minimizing HAP emissions to the extent practical. The initial startup period following initial startup of a new or reconstructed source may not exceed 6 calendar months. The initial startup period following a significant modification may not exceed 3 calendar months. Solvent and oilseed inventory information recorded during the initial startup period is excluded from use in any compliance ratio determinations.

Large cottonseed plant means a vegetable oil production process that processes 120,000 tons or more of cottonseed and other listed oilseed during all normal operating periods in a 12 operating months period used to determine compliance.

Malfunction period means a period of time between the beginning and end of a process malfunction and the time reasonably necessary for a source to correct the malfunction for which you choose to operate the source under a malfunction period subject to §63.2850(e)(2). This period may include the duration of an unscheduled process shutdown, continued operation during a malfunction, or the subsequent process startup after a shutdown resulting from a malfunction. During a malfunction period, a source complies with the standards by minimizing HAP emissions to the extent practical. Therefore, solvent and oilseed inventory information recorded during a malfunction period is excluded from use in any compliance ratio determinations.

Mechanical extraction means removing vegetable oil from oilseeds using only mechanical devices such as presses or screws that physically force the oil from the oilseed. Mechanical extraction techniques use no organic solvents to remove oil from an oilseed.

Nonoperating period means any period of time in which a source processes no agricultural product. This operating status does not apply during any period in which the source operates under an initial startup period as described in §63.2850(c)(2) or (d)(2), or a malfunction period, as described in §63.2850(e)(2).

Normal operating period means any period of time in which a source processes a listed oilseed that is not categorized as an initial startup period as described in §63.2850(c)(2) or (d)(2), or a malfunction period, as described in §63.2850(e)(2). At the beginning and ending dates of a normal operating period, solvent and oilseed inventory information is recorded and included in the compliance ratio determination.

Oilseed or listed oilseed means the following agricultural products: corn germ, cottonseed, flax, peanut, rapeseed (for example, canola), safflower, soybean, and sunflower.

Oilseed solvent loss factor means a ratio expressed as gallons of solvent loss per ton of oilseed processed. The solvent loss factors are presented in Table 1 of §63.2840 and are used to determine the allowable HAP loss.

Operating month means any calendar or accounting month in which a source processes any quantity of listed oilseed, excluding any entire calendar or accounting month in which the source operated under an initial startup period as described in §63.2850(c)(2) or (d)(2), or a malfunction period as described in §63.2850(e)(2). An operating month may include time intervals characterized by several types of operating status. However, an operating month must have at least one normal operating period.

Significant modification means the addition of new equipment or the modification of existing equipment that:

(1) Significantly affects solvent losses from your vegetable oil production process;

(2) The fixed capital cost of the new components represents a significant percentage of the fixed capital cost of building a comparable new vegetable oil production process;

(3) The fixed capital cost of the new equipment does not constitute reconstruction as defined in §63.2; and

(4) Examples of significant modifications include replacement of or major changes to solvent recovery equipment such as extractors, desolventizer-toasters/dryer-coolers, flash desolventizers, and distillation equipment associated with the mineral oil system, and equipment affecting desolventizing efficiency and steady-state operation of your vegetable oil production process such as flaking mills, oilseed heating and conditioning equipment, and cracking mills.

Small cottonseed plant means a vegetable oil production process that processes less than 120,000 tons of cottonseed and other listed oilseed during all normal operating periods in a 12 operating months period used to determine compliance.

Solvent extraction means removing vegetable oil from listed oilseed using an organic solvent in a direct-contact system.

Solvent working capacity means the volume of extraction solvent normally retained in solvent recovery equipment. Examples include components such as the solvent extractor, desolventizer-toaster, solvent storage and working tanks, mineral oil absorption system, condensers, and oil/solvent distillation system.

Specialty desolventizer means a desolventizer that removes excess solvent from soybean meal using vacuum conditions, energy from superheated solvent vapors, or reduced operating conditions (e.g., temperature) as compared to the typical operation of a conventional desolventizer. Soybeans processed in a specialty desolventizer result in high-protein vegetable meal products for human and animal consumption, such as calf milk replacement products and meat extender products.

Vegetable oil production process means the equipment comprising a continuous process for producing crude vegetable oil and meal products, including specialty soybean products, in which oil is removed from listed oilseeds through direct contact with an organic solvent. Process equipment typically includes the following components: oilseed preparation operations (including conditioning, drying, dehulling, and cracking), solvent extractors, desolventizer-toasters, meal dryers, meal coolers, meal conveyor systems, oil distillation units, solvent evaporators and condensers, solvent recovery system (also referred to as a mineral oil absorption system), vessels storing solvent-laden materials, and crude meal packaging and storage vessels. A vegetable oil production process does not include vegetable oil refining operations (including operations such as bleaching, hydrogenation, and deodorizing) and operations that engage in additional chemical treatment of crude soybean meals produced in specialty desolventizer units (including operations such as soybean isolate production).

[66 FR 19011, Apr. 12, 2001, as amended at 71 FR 20464, Apr. 20, 2006]

Attachment D: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [40 CFR 63, Subpart ZZZZ]

Source: 69 FR 33506, June 15, 2004, unless otherwise noted.

What This Subpart Covers

§ 63.6580 What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

[73 FR 3603, Jan. 18, 2008]

§ 63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

(c) An area source of HAP emissions is a source that is not a major source.

(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008]

§ 63.6590 What parts of my plant does this subpart cover?

This subpart applies to each affected source.

(a) *Affected source.* An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(1) *Existing stationary RICE.*

(i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

(ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) *New stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(3) *Reconstructed stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(b) *Stationary RICE subject to limited requirements.* (1) An affected source which meets either of the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of §63.6645(f) and the requirements of §§63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

(3) The following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:

(i) Existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(ii) Existing spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(iii) Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(iv) Existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(v) Existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

(vi) Existing residential emergency stationary RICE located at an area source of HAP emissions;

(vii) Existing commercial emergency stationary RICE located at an area source of HAP emissions; or

(viii) Existing institutional emergency stationary RICE located at an area source of HAP emissions.

(c) *Stationary RICE subject to Regulations under 40 CFR Part 60.* An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by

meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

(1) A new or reconstructed stationary RICE located at an area source;

(2) A new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;

(4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(5) A new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

(6) A new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(7) A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9674, Mar. 3, 2010; 75 FR 37733, June 30, 2010; 75 FR 51588, Aug. 20, 2010]

§ 63.6595 When do I have to comply with this subpart?

(a) *Affected sources.* (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than October 19, 2013.

(2) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.

(3) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(4) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(5) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(6) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(7) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(b) *Area sources that become major sources.* If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.

(1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.

(2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with the provisions of this subpart that are applicable to RICE located at major sources within 3 years after your area source becomes a major source of HAP.

(c) If you own or operate an affected source, you must meet the applicable notification requirements in §63.6645 and in 40 CFR part 63, subpart A.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010]

Emission and Operating Limitations

§ 63.6600 What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing, new, or reconstructed spark ignition 4SRB stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a to this subpart and the operating limitations in Table 1b to this subpart which apply to you.

(b) If you own or operate a new or reconstructed 2SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, a new or reconstructed 4SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, or a new or reconstructed CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

(c) If you own or operate any of the following stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the emission limitations in Tables 1a, 2a, 2c, and 2d to this subpart or operating limitations in Tables 1b and 2b to this subpart: an existing 2SLB stationary RICE; an existing 4SLB stationary RICE; a stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE.

(d) If you own or operate an existing non-emergency stationary CI RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010]

§ 63.6601 What emission limitations must I meet if I own or operate a 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than 500 brake HP located at a major source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart. If you own or operate a new or reconstructed 4SLB stationary RICE with a site

rating of greater than or equal to 250 and less than or equal to 500 brake HP located at major source of HAP emissions manufactured on or after January 1, 2008, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010]

§ 63.6602 What emission limitations must I meet if I own or operate an existing stationary CI RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?

If you own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart which apply to you. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

[75 FR 51589, Aug. 20, 2010]

§ 63.6603 What emission limitations and operating limitations must I meet if I own or operate an existing stationary CI RICE located at an area source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

(b) If you own or operate an existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the Federal Aid Highway System (FAHS) you do not have to meet the numerical CO emission limitations specified in Table 2d to this subpart. Existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the FAHS must meet the management practices that are shown for stationary non-emergency CI RICE less than or equal to 300 HP in Table 2d to this subpart.

[75 FR 9675, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010]

§ 63.6604 What fuel requirements must I meet if I own or operate an existing stationary CI RICE?

If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. Existing non-emergency CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or at area sources in areas of Alaska not accessible by the FAHS are exempt from the requirements of this section.

[75 FR 51589, Aug. 20, 2010]

General Compliance Requirements
§ 63.6605 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times.

(b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[75 FR 9675, Mar. 3, 2010]

Testing and Initial Compliance Requirements

§ 63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

If you own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(c) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by December 13, 2007 or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (d)(1) through (5) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

(5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3605, Jan. 18, 2008]

§ 63.6611 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?

If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must conduct an initial performance test within 240 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions specified in Table 4 to this subpart, as appropriate.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 51589, Aug. 20, 2010]

§ 63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?

If you own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

[75 FR 9676, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010]

§ 63.6615 When must I conduct subsequent performance tests?

If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.

§ 63.6620 What performance tests and other procedures must I use?

(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again.

(c) [Reserved]

(d) You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour.

(e)(1) You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad \text{(Eq. 1)}$$

Where:

C_i= concentration of CO or formaldehyde at the control device inlet,

C_o= concentration of CO or formaldehyde at the control device outlet, and

R = percent reduction of CO or formaldehyde emissions.

(2) You must normalize the carbon monoxide (CO) or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO_2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO_2concentration is measured in lieu of oxygen concentration measurement, a CO_2correction factor is needed. Calculate the CO_2correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

(i) Calculate the fuel-specific $F_o$value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

$$F_o = \frac{0.209\, F_d}{F_c} \qquad \text{(Eq. 2)}$$

Where:

F_o= Fuel factor based on the ratio of oxygen volume to the ultimate CO_2volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

F_d= Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3 /J (dscf/10^6 Btu).

F_c= Ratio of the volume of CO_2produced to the gross calorific value of the fuel from Method 19, dsm^3 /J (dscf/10^6 Btu).

(ii) Calculate the CO_2correction factor for correcting measurement data to 15 percent oxygen, as follows:

$$X_{co_2} = \frac{5.9}{F_o} \qquad \text{(Eq. 3)}$$

Where:

X_{co2}= CO_2correction factor, percent.

5.9 = 20.9 percent O_2−15 percent O_2, the defined O_2correction value, percent.

(iii) Calculate the $NO_X$and SO_2gas concentrations adjusted to 15 percent O_2using CO_2as follows:

$$C_{adj} = C_d \frac{X_{co_2}}{\%CO_2} \qquad \text{(Eq. 4)}$$

Where:

$\%CO_2$= Measured CO_2concentration measured, dry basis, percent.

(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.

(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.

(1) Identification of the specific parameters you propose to use as operating limitations;

(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (*e.g.,* operator adjustment, automatic controller adjustment, etc.) or unintentionally (*e.g.,* wear and tear, error, etc.) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;

(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;

(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;

(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and

(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9676, Mar. 3, 2010]

§ 63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?

(a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either oxygen or CO_2at both the inlet and the outlet of the control device according to the requirements in paragraphs (a)(1) through (4) of this section.

(1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.

(2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in §63.8 and according to the applicable performance specifications of 40 CFR part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

(3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.

(4) The CEMS data must be reduced as specified in §63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO_2concentration.

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (8) of this section.

(1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data.

(2) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must conduct all monitoring in continuous operation at all times that the unit is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(3) For purposes of calculating data averages, you must not use data recorded during monitoring malfunctions, associated repairs, out of control periods, or required quality assurance or control activities. You must use all the data collected during all other periods in assessing compliance. Any 15-minute period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

(4) Determine the 3-hour block average of all recorded readings, except as provided in paragraph (b)(3) of this section.

(5) Record the results of each inspection, calibration, and validation check.

(6) You must develop a site-specific monitoring plan that addresses paragraphs (b)(6)(i) through (vi) of this section.

(i) Installation of the CPMS sampling probe or other interface at the appropriate location to obtain representative measurements;

(ii) Performance and equipment specifications for the sample interface, parametric signal analyzer, and the data collection and reduction systems;

(iii) Performance evaluation procedures and acceptance criteria (*e.g.,* calibrations);

(iv) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), and (c)(4)(ii);

(v) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and

(vi) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).

(7) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(8) You must operate and maintain the CPMS in continuous operation according to the site-specific monitoring plan.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

(d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter prior to the startup of the engine.

(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

(1) An existing stationary RICE with a site rating of less than 100 HP located at a major source of HAP emissions;

(2) An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions;

(3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;

(4) An existing non-emergency, non-black start stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions;

(5) An existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions;

(6) An existing non-emergency, non-black start landfill or digester gas stationary RICE located at an area source of HAP emissions;

(7) An existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(8) An existing non-emergency, non-black start 4SRB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(9) An existing, non-emergency, non-black start 4SLB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year; and

(10) An existing, non-emergency, non-black start 4SRB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

(g) If you own or operate an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (g)(1) or paragraph (g)(2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. Existing CI engines located at area sources in areas of Alaska not accessible by the FAHS do not have to meet the requirements of paragraph (g) of this section.

(1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or

(2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals.

(h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later.

The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(j) If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to this subpart or in items 5, 6, 7, 9, or 11 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(k) If you have an operating limitation that requires the use of a temperature measurement device, you must meet the requirements in paragraphs (k)(1) through (4) of this section.

(1) Locate the temperature sensor and other necessary equipment in a position that provides a representative temperature.

(2) Use a temperature sensor with a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit), or 1.0 percent of the temperature value, whichever is larger, for a noncryogenic temperature range.

(3) Use a temperature sensor with a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit), or 2.5 percent of the temperature value, whichever is larger, for a cryogenic temperature range.

(4) Conduct a temperature measurement device calibration check at least every 3 months.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010]

§ 63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations?

(a) You must demonstrate initial compliance with each emission and operating limitation that applies to you according to Table 5 of this subpart.

(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.

Continuous Compliance Requirements
§ 63.6635 How do I monitor and collect data to demonstrate continuous compliance?

(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously at all times that the stationary RICE is operating.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

§ 63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?

(a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(c) [Reserved]

(d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

(f) *Requirements for emergency stationary RICE.* (1) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed on or after June 12, 2006, or an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1)(i) through (iii) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

(i) There is no time limit on the use of emergency stationary RICE in emergency situations.

(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

(iii) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power.

(2) If you own or operate an emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed prior to June 12, 2006, you must operate the engine according to the conditions described in paragraphs (f)(2)(i) through (iii) of this section. If you do not operate the engine according to the requirements in paragraphs (f)(2)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

(i) There is no time limit on the use of emergency stationary RICE in emergency situations.

(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance.

(iii) You may operate your emergency stationary RICE for an additional 50 hours per year in non-emergency situations. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010]

Notifications, Reports, and Records
§ 63.6645 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

(1) An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

(2) An existing stationary RICE located at an area source of HAP emissions.

(3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.

(5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

(b) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.

(c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(d) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an Initial Notification not later than July 16, 2008.

(e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008 and you are required to submit an initial notification, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

(g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).

(h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

[73 FR 3606, Jan. 18, 2008, as amended at 75 FR 9677, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010]

§ 63.6650 What reports must I submit and when?

(a) You must submit each report in Table 7 of this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.

(1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595.

(2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.

(3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.

(6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31.

(7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595.

(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

(1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.

(2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.

(3) Any problems or errors suspected with the meters.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9677, Mar. 3, 2010]

§ 63.6655 What records must I keep?

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation (*i.e.,* process equipment) or the air pollution control and monitoring equipment.

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Previous (*i.e.,* superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

(1) An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.

(2) An existing stationary emergency RICE.

(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) or (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

(1) An existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.

(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010]

§ 63.6660 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010]

Other Requirements and Information

§ 63.6665 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

[75 FR 9678, Mar. 3, 2010]

§ 63.6670 Who implements and enforces this subpart?

(a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out whether this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are:

(1) Approval of alternatives to the non-opacity emission limitations and operating limitations in §63.6600 under §63.6(g).

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

(5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in §63.6610(b).

§ 63.6675 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA); in 40 CFR 63.2, the General Provisions of this part; and in this section as follows:

Area source means any stationary source of HAP that is not a major source as defined in part 63.

Associated equipment as used in this subpart and as referred to in section 112(n)(4) of the CAA, means equipment associated with an oil or natural gas exploration or production well, and includes all equipment from the well bore to the point of custody transfer, except glycol dehydration units, storage vessels with potential for flash emissions, combustion turbines, and stationary RICE.

Black start engine means an engine whose only purpose is to start up a combustion turbine.

CAA means the Clean Air Act (42 U.S.C. 7401 *et seq.,* as amended by Public Law 101–549, 104 Stat. 2399).

Commercial emergency stationary RICE means an emergency stationary RICE used in commercial establishments such as office buildings, hotels, stores, telecommunications facilities, restaurants, financial institutions such as banks, doctor's offices, and sports and performing arts facilities.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Custody transfer means the transfer of hydrocarbon liquids or natural gas: After processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation. For the purposes of this subpart, the point at which such liquids or natural gas enters a natural gas processing plant is a point of custody transfer.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless or whether or not such failure is permitted by this subpart.

(4) Fails to satisfy the general duty to minimize emissions established by §63.6(e)(1)(i).

Diesel engine means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. This process is also known as compression ignition.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is fuel oil number 2. Diesel fuel also includes any non-distillate fuel with comparable physical and chemical properties (*e.g.* biodiesel) that is suitable for use in compression ignition engines.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO_2.

Dual-fuel engine means any stationary RICE in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel.

Emergency stationary RICE means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, *etc.* Stationary RICE used for peak shaving are not considered emergency stationary RICE. Stationary RICE used to supply power to an electric grid or that supply non-emergency power as part of a financial arrangement with another entity are not considered to be emergency engines, except as permitted under §63.6640(f). All emergency stationary RICE must comply with the requirements specified in §63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in §63.6640(f), then it is not considered to be an emergency stationary RICE under this subpart.

Engine startup means the time from initial start until applied load and engine and associated equipment reaches steady state or normal operation. For stationary engine with catalytic controls, engine startup means the time from initial start until applied load and engine and associated equipment, including the catalyst, reaches steady state or normal operation.

Four-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

Gaseous fuel means a material used for combustion which is in the gaseous state at standard atmospheric temperature and pressure conditions.

Gasoline means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

Glycol dehydration unit means a device in which a liquid glycol (including, but not limited to, ethylene glycol, diethylene glycol, or triethylene glycol) absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber). The glycol contacts and absorbs water vapor and other gas stream constituents from the natural gas and becomes “rich” glycol. This glycol is then regenerated in the glycol dehydration unit reboiler. The “lean” glycol is then recycled.

Hazardous air pollutants (HAP) means any air pollutants listed in or pursuant to section 112(b) of the CAA.

Institutional emergency stationary RICE means an emergency stationary RICE used in institutional establishments such as medical centers, nursing homes, research centers, institutions of higher education, correctional facilities, elementary and secondary schools, libraries, religious establishments, police stations, and fire stations.

ISO standard day conditions means 288 degrees Kelvin (15 degrees Celsius), 60 percent relative humidity and 101.3 kilopascals pressure.

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO_2.

Lean burn engine means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

Limited use stationary RICE means any stationary RICE that operates less than 100 hours per year.

Liquefied petroleum gas means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining of natural gas production.

Liquid fuel means any fuel in liquid form at standard temperature and pressure, including but not limited to diesel, residual/crude oil, kerosene/naphtha (jet fuel), and gasoline.

Major Source, as used in this subpart, shall have the same meaning as in §63.2, except that:

(1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;

(2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated;

(3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and

(4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

Non-selective catalytic reduction (NSCR) means an add-on catalytic nitrogen oxides (NO_X) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO_X, CO, and volatile organic compounds (VOC) into CO_2, nitrogen, and water.

Oil and gas production facility as used in this subpart means any grouping of equipment where hydrocarbon liquids are processed, upgraded (*i.e.,* remove impurities or other constituents to meet contract specifications), or stored prior to the point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage source category. For purposes of a major source determination, facility (including a building, structure, or installation) means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in this section. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Pieces of production equipment or groupings of equipment located on different oil and gas leases, mineral fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, or separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

Oxidation catalyst means an add-on catalytic control device that controls CO and VOC by oxidation.

Peaking unit or engine means any standby engine intended for use during periods of high demand that are not emergencies.

Percent load means the fractional power of an engine compared to its maximum manufacturer's design capacity at engine site conditions. Percent load may range between 0 percent to above 100 percent.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities subject to subpart HH of this part, the potential to emit provisions in §63.760(a) may be used. For natural gas transmission and storage facilities subject to subpart HHH of this part, the maximum annual facility gas throughput for storage facilities may be determined according to §63.1270(a)(1) and the maximum annual throughput for transmission facilities may be determined according to §63.1270(a)(2).

Production field facility means those oil and gas production facilities located prior to the point of custody transfer.

Production well means any hole drilled in the earth from which crude oil, condensate, or field natural gas is extracted.

Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C_3H_8.

Residential emergency stationary RICE means an emergency stationary RICE used in residential establishments such as homes or apartment buildings.

Responsible official means responsible official as defined in 40 CFR 70.2.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to December 19, 2002 with passive emission control technology for NO_X(such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

Site-rated HP means the maximum manufacturer's design capacity at engine site conditions.

Spark ignition means relating to either: A gasoline-fueled engine; or any other type of engine a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

Stationary RICE test cell/stand means an engine test cell/stand, as defined in subpart PPPPP of this part, that tests stationary RICE.

Stoichiometric means the theoretical air-to-fuel ratio required for complete combustion.

Storage vessel with the potential for flash emissions means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

Subpart means 40 CFR part 63, subpart ZZZZ.

Surface site means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3607, Jan. 18, 2008; 75 FR 9679, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010]

Table 1a to Subpart ZZZZ of Part 63—Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations at 100 percent load plus or minus 10 percent for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions:

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 4SRB stationary RICE	a. Reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007 or	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.[1]
	b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2	

[1]Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9679, Mar. 3, 2010, as amended at 75 FR 51592, Aug. 20, 2010]

Table 1b to Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed Spark Ignition 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions and Existing Spark Ignition 4SRB Stationary RICE >500 HP Located at an Area Source of HAP Emissions

As stated in §§63.6600, 63.6630 and 63.6640, you must comply with the following operating limitations for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions and existing 4SRB stationary RICE >500 HP located at an area source of HAP emissions that operate more than 24 hours per calendar year:

For each . . .	You must meet the following operating limitation . . .
1. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus; 10 percent from the pressure drop across the catalyst measured during the initial performance test and
4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent $O_2$and using NSCR; or	b. maintain the termperature of your stationary RICE exhaust so the catalyst inlet temperature is greater than or equal to 750 °F and less than or equal to 1250 °F.
4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd or less at 15 percent $O_2$and using NSCR.	
2. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR; or	Comply with any operating limitations approved by the Administrator.
4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent $O_2$and not using NSCR; or	
4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd or less at 15 percent $O_2$and using NSCR.	

[75 FR 51592, Aug. 20, 2010]

Table 2a to Subpart ZZZZ of Part 63—Emission Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP and New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE at 100 percent load plus or minus 10 percent:

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 2SLB stationary RICE	a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O_2. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O_2until June 15, 2007	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.[1]
2. 4SLB stationary RICE	a. Reduce CO emissions by 93 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O_2	
3. CI stationary RICE	a. Reduce CO emissions by 70 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O_2	

[1]Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9680, Mar. 3, 2010]

Table 2bto Subpart ZZZZ of Part 63— Operating Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP Located at a Major Source of HAP Emissions, New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions, Existing Compression Ignition Stationary RICE >500 HP, and Existing 4SLB Stationary RICE >500 HP Located at an Area Source of HAP Emissions

As stated in §§63.6600, 63.6601, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed 2SLB and compression ignition stationary RICE located at a major source of HAP emissions; new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions; existing compression ignition stationary RICE >500 HP; and existing 4SLB stationary RICE >500 HP located at an area source of HAP emissions that operate more than 24 hours per calendar year:

For each . . .	You must meet the following operating limitation . . .
1. 2SLB and 4SLB stationary RICE and CI stationary	a. maintain your catalyst so that the pressure

RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst; or 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst	drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.[1]
2. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; or 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst	Comply with any operating limitations approved by the Administrator.

[1]Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(g) for a different temperature range.

[75 FR 51593, Aug. 20, 2010]

Table 2c to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP Emissions and Existing Spark Ignition Stationary RICE ≤500 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600, 63.6602, and 63.6640, you must comply with the following requirements for existing compression ignition stationary RICE located at a major source of HAP emissions and existing spark ignition stationary RICE ≤500 HP located at a major source of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Emergency stationary CI RICE and black start stationary CI RICE.[1]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[2] b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.[3]
2. Non-Emergency, non-black start stationary CI	a. Change oil and filter every 1,000 hours of operation or	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
RICE <100 HP	annually, whichever comes first;[2]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
3. Non-Emergency, non-black start CI stationary RICE 100≤HP≤300 HP	Limit concentration of CO in the stationary RICE exhaust to 230 ppmvd or less at 15 percent O_2	
4. Non-Emergency, non-black start CI stationary RICE 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O_2; or	
	b. Reduce CO emissions by 70 percent or more.	
5. Non-Emergency, non-black start stationary CI RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O_2; or	
	b. Reduce CO emissions by 70 percent or more.	
6. Emergency stationary SI RICE and black start stationary SI RICE.[1]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[2]	
	b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first;	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
7. Non-Emergency, non-black start stationary SI RICE <100 HP that are not 2SLB stationary RICE	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[2]	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first;	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
8. Non-Emergency, non-black start 2SLB stationary SI RICE <100 HP	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first;[2]	
	b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first;	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
9. Non-emergency, non-black start 2SLB stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 225 ppmvd or less at 15 percent O_2	
10. Non-emergency, non-black start 4SLB stationary RICE	Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd or less at 15	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
100≤HP≤500	percent O_2	
11. Non-emergency, non-black start 4SRB stationary RICE 100≤HP≤500	Limit concentration of formaldehyde in the stationary RICE exhaust to 10.3 ppmvd or less at 15 percent O_2	
12. Non-emergency, non-black start landfill or digester gas-fired stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or less at 15 percent O_2	

[1]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

[2]Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2c of this subpart.

[3]Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 51593, Aug. 20, 2010]

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary RICE Located at Area Sources of HAP Emissions

As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Non-Emergency, non-black start CI stationary RICE ≤300 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first;[1]	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
2. Non-Emergency, non-black start CI stationary RICE 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O_2; or	
	b. Reduce CO emissions by 70 percent or more.	
3. Non-Emergency, non-black start CI stationary RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O_2; or	
	b. Reduce CO emissions by 70 percent or more.	
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	necessary.	
5. Emergency stationary SI RICE; black start stationary SI RICE; non-emergency, non-black start 4SLB stationary RICE >500 HP that operate 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE >500 HP that operate 24 hours or less per calendar year.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1] b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
6. Non-emergency, non-black start 2SLB stationary RICE	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.	
7. Non-emergency, non-black start 4SLB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
8. Non-emergency, non-black start 4SLB stationary RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd at 15 percent O_2; or	
	b. Reduce CO emissions by 93 percent or more.	
9. Non-emergency, non-black start 4SRB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
10. Non-emergency, non-black start 4SRB stationary RICE >500 HP	a. Limit concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd at 15 percent O_2; or	
	b. Reduce formaldehyde emissions by 76 percent or more.	
11. Non-emergency, non-black start landfill	a. Change oil and filter	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
or digester gas-fired stationary RICE	every 1,440 hours of operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

[75 FR 51595, Aug. 20, 2010]

Table 3 to Subpart ZZZZ of Part 63—Subsequent Performance Tests

As stated in §§63.6615 and 63.6620, you must comply with the following subsequent performance test requirements:

For each . . .	Complying with the requirement to . . .	You must . . .
1. New or reconstructed 2SLB stationary RICE with a brake horsepower >500 located at major sources; new or reconstructed 4SLB stationary RICE with a brake horsepower ≥250 located at major sources; and new or reconstructed CI stationary RICE with a brake horsepower >500 located at major sources	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semiannually.[1]
2. 4SRB stationary RICE with a brake horsepower ≥5,000 located at major sources	Reduce formaldehyde	Conduct subsequent performance tests

For each . . .	Complying with the requirement to . . .	You must . . .
	emissions	semiannually.[1]
3. Stationary RICE with a brake horsepower >500 located at major sources and new or reconstructed 4SLB stationary RICE with a brake horsepower 250≤HP≤500 located at major sources	Limit the concentration of formaldehyde in the stationary RICE exhaust	Conduct subsequent performance tests semiannually.[1]
4. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower >500 that are not limited use stationary RICE; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE located at an area source of HAP emissions with a brake horsepower >500 that are operated more than 24 hours per calendar year that are not limited use stationary RICE	Limit or reduce CO or formaldehyde emissions	Conduct subsequent performance tests every 8,760 hrs. or 3 years, whichever comes first.
5. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower >500 that are limited use stationary RICE; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE located at an area source of HAP emissions with a brake horsepower >500 that are operated more than 24 hours per calendar year and are limited use stationary RICE	Limit or reduce CO or formaldehyde emissions	Conduct subsequent performance tests every 8,760 hrs. or 5 years, whichever comes first.

[1]After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[75 FR 51596, Aug. 20, 2010]

Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests

As stated in §§63.6610, 63.6611, 63.6612, 63.6620, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE for existing sources:

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
1. 2SLB, 4SLB, and CI stationary RICE	a. Reduce CO emissions	i. Measure the O_2 at the inlet and outlet of the control device; and	(1) Portable CO and O_2 analyzer.	(a) Using ASTM D6522–00 (2005)[a] (incorporated by reference, *see* §63.14). Measurements to determine O_2 must be made at the same time as the measurements for CO concentration.

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
		ii. Measure the CO at the inlet and the outlet of the control device	(1) Portable CO and O_2analyzer.	(a) Using ASTM D6522–00 (2005)[a,b](incorporated by reference, *see* §63.14) or Method 10 of 40 CFR appendix A. The CO concentration must be at 15 percent O_2, dry basis.
2. 4SRB stationary RICE	a. Reduce formaldehyde emissions	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i)	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O_2at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522–00 (2005)	(a) Measurements to determine O_2concentration must be made at the same time as the measurements for formaldehyde concentration.
		iii. Measure moisture content at the inlet and outlet of the control device; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. Measure formaldehyde at the inlet and the outlet of the control device.	(1) Method 320 of 40 CFR part 63, appendix A; or ASTM D6348–03[c], provided in ASTM D6348–03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130.	(a) Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
3. Stationary RICE	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i)	(a) If using a control device, the sampling site must be located at the outlet of the control device.

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
		ii. Determine the O_2concentration of the stationary RICE exhaust at the sampling port location; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522–00 (2005)	(a) Measurements to determine O_2concentration must be made at the same time and location as the measurements for formaldehyde concentration.
		iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. Measure formaldehyde at the exhaust of the stationary RICE; or	(1) Method 320 of 40 CFR part 63, appendix A; or ASTM D6348–03[c], provided in ASTM D6348–03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. Measure CO at the exhaust of the stationary RICE.	(1) Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522–00 (2005)[a], Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03	(a) CO concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour longer runs.

[a]You may also use Methods 3A and 10 as options to ASTM–D6522–00 (2005). You may obtain a copy of ASTM–D6522–00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106. ASTM–D6522–00 (2005) may be used to test both CI and SI stationary RICE.

[b]You may also use Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03.

[c]You may obtain a copy of ASTM–D6348–03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

[75 FR 9682, Mar. 3, 2010]

Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations and Operating

Limitations

As stated in §§63.6612, 63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following:

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
1. 2SLB and 4SLB stationary RICE >500 HP located at a major source and new or reconstructed CI stationary RICE >500 HP located at a major source	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
2. 2SLB and 4SLB stationary RICE >500 HP located at a major source and new or reconstructed CI stationary RICE >500 HP located at a major source	a. Reduce CO emissions and not using oxidation catalyst	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
3. 2SLB and 4SLB stationary RICE >500 HP located at a major source and new or reconstructed CI stationary RICE >500 HP located at a major source	a. Reduce CO emissions, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O_2or CO_2at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and
		ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and
		iii. The average reduction of CO calculated using §63.6620 equals or exceeds the

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
		required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.
4. 4SRB stationary RICE >500 HP located at a major source	a. Reduce formaldehyde emissions and using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
5. 4SRB stationary RICE >500 HP located at a major source	a. Reduce formaldehyde emissions and not using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
6. Stationary RICE >500 HP located at a major source	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
		temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
7. Stationary RICE >500 HP located at a major source	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
8. Existing stationary non-emergency RICE ≥100 HP located at a major source, existing non-emergency CI stationary RICE >500 HP, and existing stationary non-emergency RICE ≥100 HP located at an area source	a. Reduce CO or formaldehyde emissions	i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.
9. Existing stationary non-emergency RICE ≥100 HP located at a major source, existing non-emergency CI stationary RICE >500 HP, and existing stationary non-emergency RICE ≥100 HP located at an area source	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.

[75 FR 9684, Mar. 3, 2010]

Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations and Operating Limitations

As stated in §63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP	a. Reduce CO emissions and using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved;[a]and ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
2. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP	a. Reduce CO emissions and not using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved;[a]and ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
3. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, new or reconstructed non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP, existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Reduce CO emissions and using a CEMS	i. Collecting the monitoring data according to §63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction of CO emissions according to §63.6620; and ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period; and iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.
4. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and using NSCR	i. Collecting the catalyst inlet temperature data according to §63.6625(b); and ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
5. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and not using NSCR	i. Collecting the approved operating parameter (if any) data according to §63.6625(b); and ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
6. Non-emergency 4SRB stationary	a. Reduce formaldehyde	Conducting semiannual performance

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
RICE with a brake HP ≥5,000 located at a major source of HAP	emissions	tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved.[a]
7. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit;[a]and ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
8. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit;[a]and ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency landfill or digester gas stationary SI RICE located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
10. Existing stationary CI RICE >500 HP that are not limited use stationary RICE, and existing 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year and are not limited use stationary RICE	a. Reduce CO or formaldehyde emissions, or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and using oxidation catalyst or NSCR	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
		operating limitation established during the performance test.
11. Existing stationary CI RICE >500 HP that are not limited use stationary RICE, and existing 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year and are not limited use stationary RICE	a. Reduce CO or formaldehyde emissions, or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and not using oxidation catalyst or NSCR	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
12. Existing limited use CI stationary RICE >500 HP and existing limited use 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year	a. Reduce CO or formaldehyde emissions or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and using an oxidation catalyst or NSCR	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
13. Existing limited use CI stationary RICE >500 HP and existing limited use 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year	a. Reduce CO or formaldehyde emissions or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and using an oxidation catalyst or NSCR	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.

[a]After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[75 FR 51600, Aug. 20, 2010]

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in §63.6650, you must comply with the following requirements for reports:

For each ...	You must submit a ...	The report must contain ...	You must submit the report ...
1. Existing non-emergency, non-black start stationary RICE 100≤HP≤500 located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE >500 HP located at a major source of HAP; existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE >300 HP located at an area source of HAP; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP and operated more than 24 hours per calendar year; new or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP; and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP	Compliance report	a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or c. If you had a malfunction during the reporting period, the information in §63.6650(c)(4)	i. Semiannually according to the requirements in §63.6650(b)(1)–(5) for engines that are not limited use stationary RICE subject to numerical emission limitations; and ii. Annually according to the requirements in §63.6650(b)(6)–(9) for engines that are limited use stationary RICE subject to numerical emission limitations. i. Semiannually according to the requirements in §63.6650(b). i. Semiannually according to the requirements in §63.6650(b).
2. New or reconstructed non-emergency stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	Report	a. The fuel flow rate of each fuel and the heating values that were used in your calculations, and you must demonstrate that the percentage of heat input provided by landfill gas or digester gas, is equivalent to 10 percent or more of the gross heat input on an annual basis; and	i. Annually, according to the requirements in §63.6650.
		b. The operating limits provided in your federally enforceable permit, and any deviations from these limits; and	i. See item 2.a.i.
		c. Any problems or errors suspected with the meters.	i. See item 2.a.i.

[75 FR 51603, Aug. 20, 2010]

Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in §63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in §63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)–(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)–(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)–(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)–(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)–(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §§63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	
§63.7(b)(1)	Notification of performance test	Yes	Except that §63.7(b)(1) only applies as specified in §63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that §63.7(b)(2) only applies as specified in §63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that §63.7(c) only applies as specified in §63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at §63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at §63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at §63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)–(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	Yes.	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	Yes.	
§63.8(c)(2)–(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§63.8(c)(6)–(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for §63.8(e)(5)(ii), which applies to COMS.
		Except that §63.8(e) only applies as specified in §63.6645.	
§63.8(f)(1)–(5)	Alternative monitoring method	Yes	Except that §63.8(f)(4) only applies as specified in §63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that §63.8(f)(6) only applies as specified in §63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.9(b)(1)–(5)	Initial notifications	Yes	Except that §63.9(b)(3) is reserved.
		Except that §63.9(b) only applies as specified in §63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that §63.9(c) only applies as specified in §63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that §63.9(d) only applies as specified in §63.6645.
§63.9(e)	Notification of performance test	Yes	Except that §63.9(e) only applies as specified in §63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that §63.9(g) only applies as specified in §63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that §63.9(g) only applies as specified in §63.6645.	
§63.9(h)(1)–(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. §63.9(h)(4) is reserved.
			Except that §63.9(h) only applies as specified in §63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.10(b)(1)	Record retention	Yes.	
§63.10(b)(2)(i)–(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)–(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that §63.10(c)(2)–(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that §63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.15	Availability of information	Yes.	

[75 FR 9688, Mar. 3, 2010]

Attachment E: National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR 63, Subpart DDDDD]

Amendment(s) published March 21, 2011, in 76 FR 15664

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§ 63.7480 What is the purpose of this subpart?

This subpart establishes national emission limitations and work practice standards for hazardous air pollutants (HAP) emitted from industrial, commercial, and institutional boilers and process heaters located at major sources of HAP. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and work practice standards.

§ 63.7485 Am I subject to this subpart?

You are subject to this subpart if you own or operate an industrial, commercial, or institutional boiler or process heater as defined in §63.7575 that is located at, or is part of, a major source of HAP, except as specified in §63.7491. For purposes of this subpart, a major source of HAP is as defined in §63.2, except that for oil and natural gas production facilities, a major source of HAP is as defined in §63.761 (subpart HH of this part, National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities).

§ 63.7490 What is the affected source of this subpart?

(a) This subpart applies to new, reconstructed, and existing affected sources as described in paragraphs (a)(1) and (2) of this section.

(1) The affected source of this subpart is the collection at a major source of all existing industrial, commercial, and institutional boilers and process heaters within a subcategory as defined in §63.7575.

(2) The affected source of this subpart is each new or reconstructed industrial, commercial, or institutional boiler or process heater, as defined in §63.7575, located at a major source.

(b) A boiler or process heater is new if you commence construction of the boiler or process heater after June 4, 2010, and you meet the applicability criteria at the time you commence construction.

(c) A boiler or process heater is reconstructed if you meet the reconstruction criteria as defined in §63.2, you commence reconstruction after June 4, 2010, and you meet the applicability criteria at the time you commence reconstruction.

(d) A boiler or process heater is existing if it is not new or reconstructed.

§ 63.7491 Are any boilers or process heaters not subject to this subpart?

The types of boilers and process heaters listed in paragraphs (a) through (m) of this section are not subject to this subpart.

(a) An electric utility steam generating unit.

(b) A recovery boiler or furnace covered by subpart MM of this part.

(c) A boiler or process heater that is used specifically for research and development. This does not include units that provide heat or steam to a process at a research and development facility.

(d) A hot water heater as defined in this subpart.

(e) A refining kettle covered by subpart X of this part.

(f) An ethylene cracking furnace covered by subpart YY of this part.

(g) Blast furnace stoves as described in EPA–453/R–01–005 (incorporated by reference, see §63.14).

(h) Any boiler or process heater that is part of the affected source subject to another subpart of this part (i.e., another National Emission Standards for Hazardous Air Pollutants in 40 CFR part 63).

(i) Any boiler or process heater that is used as a control device to comply with another subpart of this part, provided that at least 50 percent of the heat input to the boiler is provided by the gas stream that is regulated under another subpart.

(j) Temporary boilers as defined in this subpart.

(k) Blast furnace gas fuel-fired boilers and process heaters as defined in this subpart.

(l) Any boiler specifically listed as an affected source in any standard(s) established under section 129 of the Clean Air Act.

(m) A boiler required to have a permit under section 3005 of the Solid Waste Disposal Act or covered by subpart EEE of this part (e.g., hazardous waste boilers).

§ 63.7495 When do I have to comply with this subpart?

(a) If you have a new or reconstructed boiler or process heater, you must comply with this subpart by May 20, 2011 or upon startup of your boiler or process heater, whichever is later.

(b) If you have an existing boiler or process heater, you must comply with this subpart no later than March 21, 2014.

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, paragraphs (c)(1) and (2) of this section apply to you.

(1) Any new or reconstructed boiler or process heater at the existing source must be in compliance with this subpart upon startup.

(2) Any existing boiler or process heater at the existing source must be in compliance with this subpart within 3 years after the source becomes a major source.

(d) You must meet the notification requirements in §63.7545 according to the schedule in §63.7545 and in subpart A of this part. Some of the notifications must be submitted before you are required to comply with the emission limits and work practice standards in this subpart.

(e) If you own or operate an industrial, commercial, or institutional boiler or process heater and would be subject to this subpart except for the exemption in §63.7491(l) for commercial and industrial solid waste incineration units covered by part 60, subpart CCCC or subpart DDDD, and you cease combusting solid waste, you must be in compliance with this subpart on the effective date of the switch from waste to fuel.

Emission Limitations and Work Practice Standards

§ 63.7499 What are the subcategories of boilers and process heaters?

The subcategories of boilers and process heaters, as defined in §63.7575 are:

(a) Pulverized coal/solid fossil fuel units.

(b) Stokers designed to burn coal/solid fossil fuel.

(c) Fluidized bed units designed to burn coal/solid fossil fuel.

(d) Stokers designed to burn biomass/bio-based solid.

(e) Fluidized bed units designed to burn biomass/bio-based solid.

(f) Suspension burners/Dutch Ovens designed to burn biomass/bio-based solid.

(g) Fuel Cells designed to burn biomass/bio-based solid.

(h) Hybrid suspension/grate burners designed to burn biomass/bio-based solid.

(i) Units designed to burn solid fuel.

(j) Units designed to burn liquid fuel.

(k) Units designed to burn liquid fuel in non-continental States or territories.

(l) Units designed to burn natural gas, refinery gas or other gas 1 fuels.

(m) Units designed to burn gas 2 (other) gases.

(n) Metal process furnaces.

(o) Limited-use boilers and process heaters.

§ 63.7500 What emission limitations, work practice standards, and operating limits must I meet?

(a) You must meet the requirements in paragraphs (a)(1) through (3) of this section, except as provided in paragraphs (b) and (c) of this section. You must meet these requirements at all times.

(1) You must meet each emission limit and work practice standard in Tables 1 through 3, and 12 to this subpart that applies to your boiler or process heater, for each boiler or process heater at your source, except as provided under §63.7522. If your affected source is a new or reconstructed affected source that commenced construction or reconstruction after June 4, 2010, and before May 20, 2011, you may comply with the emission limits in Table 1 or 12 to this subpart until March 21, 2014. On and after March 21, 2014, you must comply with the emission limits in Table 1 to this subpart.

(2) You must meet each operating limit in Table 4 to this subpart that applies to your boiler or process heater. If you use a control device or combination of control devices not covered in Table 4 to this subpart, or you wish to establish and monitor an alternative operating limit and alternative monitoring parameters, you must apply to the EPA Administrator for approval of alternative monitoring under §63.8(f).

(3) At all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(b) As provided in §63.6(g), EPA may approve use of an alternative to the work practice standards in this section.

(c) Limited-use boilers and process heaters must complete a biennial tune-up as specified in §63.7540. They are not subject to the emission limits in Tables 1 and 2 to this subpart, the annual tune-up requirement in Table 3 to this subpart, or the operating limits in Table 4 to this subpart. Major sources that have limited-use boilers and process heaters must complete an energy assessment as specified in Table 3 to this subpart if the source has other existing boilers subject to this subpart that are not limited-use boilers.

§ 63.7501 How can I assert an affirmative defense if I exceed an emission limitations during a malfunction?

In response to an action to enforce the emission limitations and operating limits set forth in §63.7500 you may assert an affirmative defense to a claim for civil penalties for exceeding such standards that are caused by malfunction, as defined at §63.2. Appropriate penalties may be assessed, however, if you fail to meet your burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

(a) To establish the affirmative defense in any action to enforce such a limit, you must timely meet the notification requirements in paragraph (b) of this section, and must prove by a preponderance of evidence that:

(1) The excess emissions:

(i) Were caused by a sudden, infrequent, and unavoidable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner, and

(ii) Could not have been prevented through careful planning, proper design or better operation and maintenance practices; and

(iii) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and

(iv) Were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

(2) Repairs were made as expeditiously as possible when the applicable emission limitations were being exceeded. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and

(3) The frequency, amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions; and

(4) If the excess emissions resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

(5) All possible steps were taken to minimize the impact of the excess emissions on ambient air quality, the environment and human health; and

(6) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and

(7) All of the actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs; and

(8) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions; and

(9) A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of excess emissions that were the result of the malfunction.

(b) *Notification.* The owner or operator of the facility experiencing an exceedance of its emission limitat(s) during a malfunction shall notify the Administrator by telephone or facsimile (fax) transmission as soon as possible, but no later than 2 business days after the initial occurrence of the malfunction, if it wishes to avail itself of an affirmative defense to civil penalties for that malfunction. The owner or operator seeking to assert an affirmative defense shall also submit a written report to the Administrator within 45 days of the initial ocurrence of the exceedance of the standard in §63.7500 to demonstrate, with all necessary supporting documentation, that it has met the requirements set forth in paragraph (a) of this section. The owner or operator may seek an extension of this deadline for up to 30 additional days by submitting a written request to the Administrator before the expiration of the 45 day period. Until a request for an extension has been approved by the Administrator, the owner or operator is subject to the requirement to submit such report within 45 days of the initial occurrence of the exceedance.

General Compliance Requirements

§ 63.7505 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limits and operating limits in this subpart. These limits apply to you at all times.

(b) [Reserved]

(c) You must demonstrate compliance with all applicable emission limits using performance testing, fuel analysis, or continuous monitoring systems (CMS), including a continuous emission monitoring system (CEMS) or continuous opacity monitoring system (COMS), where applicable. You may demonstrate compliance with the applicable emission limit for hydrogen chloride or mercury using fuel analysis if the emission rate calculated according to §63.7530(c) is less than the applicable emission limit. Otherwise, you must demonstrate compliance for hydrogen chloride or mercury using performance testing, if subject to an applicable emission limit listed in Table 1, 2, or 12 to this subpart.

(d) If you demonstrate compliance with any applicable emission limit through performance testing and subsequent compliance with operating limits (including the use of continuous parameter monitoring system), or with a CEMS, or COMS, you must develop a site-specific monitoring plan according to the requirements in paragraphs (d)(1) through (4) of this section for the use of any CEMS, COMS, or continuous parameter monitoring system. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under §63.8(f).

(1) For each CMS required in this section (including CEMS, COMS, or continuous parameter monitoring system), you must develop, and submit to the delegated authority for approval upon request, a site-specific monitoring plan that addresses paragraphs (d)(1)(i) through (iii) of this section. You must submit this site-specific monitoring plan, if requested, at least 60 days before your initial performance evaluation of your CMS. This requirement to develop and submit a site specific monitoring plan does not apply to affected sources with existing monitoring plans that apply to CEMS and COMS prepared under appendix B to part 60 of this chapter and that meet the requirements of §63.7525.

(i) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and

(iii) Performance evaluation procedures and acceptance criteria (*e.g.,* calibrations).

(2) In your site-specific monitoring plan, you must also address paragraphs (d)(2)(i) through (iii) of this section.

(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1)(ii), (c)(3), and (c)(4)(ii);

(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and

(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c) (as applicable in Table 10 to this subpart), (e)(1), and (e)(2)(i).

(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.

(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

Testing, Fuel Analyses, and Initial Compliance Requirements

§ 63.7510 What are my initial compliance requirements and by what date must I conduct them?

(a) For affected sources that elect to demonstrate compliance with any of the applicable emission limits in Tables 1 or 2 of this subpart through performance testing, your initial compliance requirements include conducting performance tests according to §63.7520 and Table 5 to this subpart, conducting a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart, establishing operating limits according to §63.7530 and Table 7 to this subpart, and conducting CMS performance evaluations according to §63.7525. For affected sources that burn a single type of fuel, you are exempted from the compliance requirements of conducting a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart. For purposes of this subpart, units that use a supplemental fuel only for startup, unit shutdown, and transient flame stability purposes still qualify as affected sources that burn a single type of fuel, and the supplemental fuel is not subject to the fuel analysis requirements under §63.7521 and Table 6 to this subpart.

(b) For affected sources that elect to demonstrate compliance with the applicable emission limits in Tables 1 or 2 of this subpart for hydrogen chloride or mercury through fuel analysis, your initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart and establish operating limits according to §63.7530 and Table 8 to this subpart.

(c) If your boiler or process heater is subject to a carbon monoxide limit, your initial compliance demonstration for carbon monoxide is to conduct a performance test for carbon monoxide according to Table 5 to this subpart. Your initial compliance demonstration for carbon monoxide also includes conducting a performance evaluation of your continuous oxygen monitor according to §63.7525(a).

(d) If your boiler or process heater subject to a PM limit has a heat input capacity greater than 250 MMBtu per hour and combusts coal, biomass, or residual oil, your initial compliance demonstration for PM is to conduct a performance evaluation of your continuous emission monitoring system for PM according to §63.7525(b). Boilers and process heaters that use a continuous emission monitoring system for PM are exempt from the performance testing and operating limit requirements specified in paragraph (a) of this section.

(e) For existing affected sources, you must demonstrate initial compliance, as specified in paragraphs (a) through (d) of this section, no later than 180 days after the compliance date that is specified for your source in §63.7495 and according to the applicable provisions in §63.7(a)(2) as cited in Table 10 to this subpart.

(f) If your new or reconstructed affected source commenced construction or reconstruction after June 4, 2010, you must demonstrate initial compliance with the emission limits no later than November 16, 2011 or within 180 days after startup of the source, whichever is later. If you are demonstrating compliance with an emission limit in Table 12 to this subpart that is less stringent than (that is, higher than) the applicable emission limit in Table 1 to this subpart, you must demonstrate compliance with the applicable emission limit in Table 1 no later than September 17, 2014.

(g) For affected sources that ceased burning solid waste consistent with §63.7495(e) and for which your initial compliance date has passed, you must demonstrate compliance within 60 days of the effective date of the waste-to-fuel switch. If you have not conducted your compliance demonstration for this subpart within the previous 12 months, you must complete all compliance demonstrations for this subpart before you commence or recommence combustion of solid waste.

§ 63.7515 When must I conduct subsequent performance tests, fuel analyses, or tune-ups?

(a) You must conduct all applicable performance tests according to §63.7520 on an annual basis, except those for dioxin/furan emissions, unless you follow the requirements listed in paragraphs (b) through (e) of this section. Annual performance tests must be completed no more than 13 months after the previous performance test, unless you follow the requirements listed in paragraphs (b) through (e) of this section. Annual performance testing for dioxin/furan emissions is not required after the initial compliance demonstration.

(b) You can conduct performance tests less often for a given pollutant if your performance tests for the pollutant for at least 2 consecutive years show that your emissions are at or below 75 percent of the emission limit, and if there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions. In this case, you do not have to conduct a performance test for that pollutant for the next 2 years. You must conduct a performance test during the third year and no more than 37 months after the previous performance test. If you elect to demonstrate compliance using emission averaging under §63.7522, you must continue to conduct performance tests annually.

(c) If your boiler or process heater continues to meet the emission limit for the pollutant, you may choose to conduct performance tests for the pollutant every third year if your emissions are at or below 75 percent of the emission limit, and if there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions, but each such performance test must be conducted no more than 37 months after the previous performance test. If you elect to demonstrate compliance using emission averaging under §63.7522, you must continue to conduct performance tests annually. The requirement to test at maximum chloride input level is waived unless the stack test is conducted for HCl. The requirement to test at maximum Hg input level is waived unless the stack test is conducted for Hg.

(d) If a performance test shows emissions exceeded 75 percent of the emission limit for a pollutant, you must conduct annual performance tests for that pollutant until all performance tests over a consecutive 2-year period show compliance.

(e) If you are required to meet an applicable tune-up work practice standard, you must conduct an annual or biennial performance tune-up according to §63.7540(a)(10) and (a)(11), respectively. Each annual tune-up specified in §63.7540(a)(10) must be no more than 13 months after the previous tune-up. Each biennial tune-up specified in §63.7540(a)(11) must be conducted no more than 25 months after the previous tune-up.

(f) If you demonstrate compliance with the mercury or hydrogen chloride based on fuel analysis, you must conduct a monthly fuel analysis according to §63.7521 for each type of fuel burned that is subject to an emission limit in Table 1, 2, or 12 of this subpart. If you burn a new type of fuel, you must conduct a fuel analysis before burning the new type of fuel in your boiler or process heater. You must still meet all applicable continuous compliance requirements in §63.7540. If 12 consecutive monthly fuel analyses demonstrate compliance, you may request decreased fuel analysis frequency by applying to the EPA Administrator for approval of alternative monitoring under §63.8(f).

(g) You must report the results of performance tests and the associated initial fuel analyses within 90 days after the completion of the performance tests. This report must also verify that the operating limits for your affected source have not changed or provide documentation of revised operating parameters established according to §63.7530 and Table 7 to this subpart, as applicable. The reports for all subsequent performance tests must include all applicable information required in §63.7550.

§ 63.7520 What stack tests and procedures must I use?

(a) You must conduct all performance tests according to §63.7(c), (d), (f), and (h). You must also develop a site-specific stack test plan according to the requirements in §63.7(c). You shall conduct all performance tests under such conditions as the Administrator specifies to you based on representative performance of the affected source for the period being tested. Upon request, you shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests.

(b) You must conduct each performance test according to the requirements in Table 5 to this subpart.

(c) You must conduct each performance test under the specific conditions listed in Tables 5 and 7 to this subpart. You must conduct performance tests at representative operating load conditions while burning the type of fuel or mixture of fuels that has the highest content of chlorine and mercury, and you must demonstrate initial compliance and establish your operating limits based on these performance tests. These requirements could result in the need to conduct more than one performance test. Following each performance test and until the next performance test, you must comply with the operating limit for operating load conditions specified in Table 4 to this subpart.

(d) You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must comply with the minimum applicable sampling times or volumes specified in Tables 1, 2, and 12 to this subpart.

(e) To determine compliance with the emission limits, you must use the F-Factor methodology and equations in sections 12.2 and 12.3 of EPA Method 19 at 40 CFR part 60, appendix A–7 of this chapter to convert the measured particulate matter concentrations, the measured hydrogen chloride concentrations, and the measured mercury concentrations that result from the initial performance test to pounds per million Btu heat input emission rates using F-factors.

§ 63.7521 What fuel analyses, fuel specification, and procedures must I use?

(a) For solid, liquid, and gas 2 (other) fuels, you must conduct fuel analyses for chloride and mercury according to the procedures in paragraphs (b) through (e) of this section and Table 6 to this subpart, as applicable. You are not required to conduct fuel analyses for fuels used for only startup, unit shutdown, and transient flame stability purposes. You are required to conduct fuel analyses only for fuels and units that are subject to emission limits for mercury and hydrogen chloride in Tables 1, 2, or 12 to this subpart. Gaseous and liquid fuels are exempt from requirements in paragraphs (c) and (d) of this section and Table 6 of this subpart.

(b) You must develop and submit a site-specific fuel monitoring plan to the EPA Administrator for review and approval according to the following procedures and requirements in paragraphs (b)(1) and (2) of this section.

(1) You must submit the fuel analysis plan no later than 60 days before the date that you intend to conduct an initial compliance demonstration.

(2) You must include the information contained in paragraphs (b)(2)(i) through (vi) of this section in your fuel analysis plan.

(i) The identification of all fuel types anticipated to be burned in each boiler or process heater.

(ii) For each fuel type, the notification of whether you or a fuel supplier will be conducting the fuel analysis.

(iii) For each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if your procedures are different from paragraph (c) or (d) of this section. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing with other dissimilar fuel types.

(iv) For each fuel type, the analytical methods from Table 6, with the expected minimum detection levels, to be used for the measurement of chlorine or mercury.

(v) If you request to use an alternative analytical method other than those required by Table 6 to this subpart, you must also include a detailed description of the methods and procedures that you are proposing to use. Methods in Table 6 shall be used until the requested alternative is approved.

(vi) If you will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 to this subpart.

(c) At a minimum, you must obtain three composite fuel samples for each fuel type according to the procedures in paragraph (c)(1) or (2) of this section.

(1) If sampling from a belt (or screw) feeder, collect fuel samples according to paragraphs (c)(1)(i) and (ii) of this section.

(i) Stop the belt and withdraw a 6-inch wide sample from the full cross-section of the stopped belt to obtain a minimum two pounds of sample. You must collect all the material (fines and coarse) in the full cross-section. You must transfer the sample to a clean plastic bag.

(ii) Each composite sample will consist of a minimum of three samples collected at approximately equal 1-hour intervals during the testing period.

(2) If sampling from a fuel pile or truck, you must collect fuel samples according to paragraphs (c)(2)(i) through (iii) of this section.

(i) For each composite sample, you must select a minimum of five sampling locations uniformly spaced over the surface of the pile.

(ii) At each sampling site, you must dig into the pile to a depth of 18 inches. You must insert a clean flat square shovel into the hole and withdraw a sample, making sure that large pieces do not fall off during sampling.

(iii) You must transfer all samples to a clean plastic bag for further processing.

(d) You must prepare each composite sample according to the procedures in paragraphs (d)(1) through (7) of this section.

(1) You must thoroughly mix and pour the entire composite sample over a clean plastic sheet.

(2) You must break sample pieces larger than 3 inches into smaller sizes.

(3) You must make a pie shape with the entire composite sample and subdivide it into four equal parts.

(4) You must separate one of the quarter samples as the first subset.

(5) If this subset is too large for grinding, you must repeat the procedure in paragraph (d)(3) of this section with the quarter sample and obtain a one-quarter subset from this sample.

(6) You must grind the sample in a mill.

(7) You must use the procedure in paragraph (d)(3) of this section to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

(e) You must determine the concentration of pollutants in the fuel (mercury and/or chlorine) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 to this subpart.

(f) To demonstrate that a gaseous fuel other than natural gas or refinery gas qualifies as an other gas 1 fuel, as defined in §63.7575, you must conduct a fuel specification analyses for hydrogen sulfide and mercury according to the procedures in paragraphs (g) through (i) of this section and Table 6 to this subpart, as applicable. You are not required to conduct the fuel specification analyses in paragraphs (g) through (i) of this section for gaseous fuels other than natural gas or refinery gas that are complying with the limits for units designed to burn gas 2 (other) fuels.

(g) You must develop and submit a site-specific fuel analysis plan for other gas 1 fuels to the EPA Administrator for review and approval according to the following procedures and requirements in paragraphs (g)(1) and (2) of this section.

(1) You must submit the fuel analysis plan no later than 60 days before the date that you intend to conduct an initial compliance demonstration.

(2) You must include the information contained in paragraphs (g)(2)(i) through (vi) of this section in your fuel analysis plan.

(i) The identification of all gaseous fuel types other than natural gas or refinery gas anticipated to be burned in each boiler or process heater.

(ii) For each fuel type, the notification of whether you or a fuel supplier will be conducting the fuel specification analysis.

(iii) For each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the samples if your procedures are different from the sampling methods contained in Table 6. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing with other dissimilar fuel types. If multiple boilers or process heaters are fueled by a common fuel stream it is permissible to conduct a single gas specification at the common point of gas distribution.

(iv) For each fuel type, the analytical methods from Table 6, with the expected minimum detection levels, to be used for the measurement of hydrogen sulfide and mercury.

(v) If you request to use an alternative analytical method other than those required by Table 6 to this subpart, you must also include a detailed description of the methods and procedures that you are proposing to use. Methods in Table 6 shall be used until the requested alternative is approved.

(vi) If you will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 to this subpart.

(h) You must obtain a single fuel sample for each other gas 1 fuel type according to the sampling procedures listed in Table 6 for fuel specification of gaseous fuels.

(i) You must determine the concentration in the fuel of mercury, in units of microgram per cubic meter, and of hydrogen sulfide, in units of parts per million, by volume, dry basis, of each sample for each gas 1 fuel type according to the procedures in Table 6 to this subpart.

§ 63.7522 Can I use emissions averaging to comply with this subpart?

(a) As an alternative to meeting the requirements of §63.7500 for particulate matter, hydrogen chloride, or mercury on a boiler or process heater-specific basis, if you have more than one existing boiler or process heater in any subcategory located at your facility, you may demonstrate compliance by emissions averaging, if your averaged emissions are not more than 90 percent of the applicable emission limit, according to the procedures in this section. You may not include new boilers or process heaters in an emissions average.

(b) For a group of two or more existing boilers or process heaters in the same subcategory that each vent to a separate stack, you may average particulate matter, hydrogen chloride, or mercury emissions among existing units to demonstrate compliance with the limits in Table 2 to this subpart if you satisfy the requirements in paragraphs (c), (d), (e), (f), and (g) of this section.

(c) For each existing boiler or process heater in the averaging group, the emission rate achieved during the initial compliance test for the HAP being averaged must not exceed the emission level that was being achieved on May 20, 2011 or the control technology employed during the initial compliance test must not be less effective for the HAP being averaged than the control technology employed on May 20, 2011.

(d) The averaged emissions rate from the existing boilers and process heaters participating in the emissions averaging option must be in compliance with the limits in Table 2 to this subpart at all times following the compliance date specified in §63.7495.

(e) You must demonstrate initial compliance according to paragraph (e)(1) or (2) of this section using the maximum rated heat input capacity or maximum steam generation capacity of each unit and the results of the initial performance tests or fuel analysis.

(1) You must use Equation 1 of this section to demonstrate that the particulate matter, hydrogen chloride, or mercury emissions from all existing units participating in the emissions averaging option for that pollutant do not exceed the emission limits in Table 2 to this subpart.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^{n} (Er \times Hm) \div \sum_{i=1}^{n} Hm \qquad \text{(Eq. 1)}$$

Where:

AveWeightedEmissions = Average weighted emissions for particulate matter, hydrogen chloride, or mercury, in units of pounds per million Btu of heat input.

Er = Emission rate (as determined during the initial compliance demonstration) of particulate matter, hydrogen chloride, or mercury from unit, i, in units of pounds per million Btu of heat input. Determine the emission rate for particulate matter, hydrogen chloride, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for hydrogen chloride or mercury using the applicable equation in §63.7530(c).

Hm = Maximum rated heat input capacity of unit, i, in units of million Btu per hour.

n = Number of units participating in the emissions averaging option.

1.1 = Required discount factor.

(2) If you are not capable of determining the maximum rated heat input capacity of one or more boilers that generate steam, you may use Equation 2 of this section as an alternative to using Equation 1 of this section to demonstrate that the particulate matter, hydrogen chloride, or mercury emissions from all existing units participating in the emissions averaging option do not exceed the emission limits for that pollutant in Table 2 to this subpart.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^{n} (Er \times Sm \times Cfi) \div \sum_{i=1}^{n} (Sm \times Cfi) \qquad \text{(Eq. 2)}$$

Where:

AveWeightedEmissions = Average weighted emission level for PM, hydrogen chloride, or mercury, in units of pounds per million Btu of heat input.

Er = Emission rate (as determined during the most recent compliance demonstration) of particulate matter, hydrogen chloride, or mercury from unit, i, in units of pounds per million Btu of heat input. Determine the emission rate for particulate matter, hydrogen chloride, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for hydrogen chloride or mercury using the applicable equation in §63.7530(c).

Sm = Maximum steam generation capacity by unit, i, in units of pounds.

Cfi = Conversion factor, calculated from the most recent compliance test, in units of million Btu of heat input per pounds of steam generated for unit, i.

1.1 = Required discount factor.

(f) After the initial compliance demonstration described in paragraph (e) of this section, you must demonstrate compliance on a monthly basis determined at the end of every month (12 times per year) according to paragraphs (f)(1) through (3) of this section. The first monthly period begins on the compliance date specified in §63.7495.

(1) For each calendar month, you must use Equation 3 of this section to calculate the average weighted emission rate for that month using the actual heat input for each existing unit participating in the emissions averaging option.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^{n} (Er \times Hb) \div \sum_{i=1}^{n} Hb \qquad \text{(Eq. 3)}$$

Where:

AveWeightedEmissions = Average weighted emission level for particulate matter, hydrogen chloride, or mercury, in units of pounds per million Btu of heat input, for that calendar month.

Er = Emission rate (as determined during the most recent compliance demonstration) of particulate matter, hydrogen chloride, or mercury from unit, i, in units of pounds per million Btu of heat input. Determine the emission rate for particulate matter, hydrogen chloride, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for hydrogen chloride or mercury using the applicable equation in §63.7530(c).

Hb = The heat input for that calendar month to unit, i, in units of million Btu.

n = Number of units participating in the emissions averaging option.

1.1 = Required discount factor.

(2) If you are not capable of monitoring heat input, you may use Equation 4 of this section as an alternative to using Equation 3 of this section to calculate the average weighted emission rate using the actual steam generation from the boilers participating in the emissions averaging option.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^{n} (Er \times Sa \times Cfi) \div \sum_{i=1}^{n} (Sa \times Cfi) \qquad \text{(Eq. 4)}$$

Where:

AveWeightedEmissions = average weighted emission level for PM, hydrogen chloride, or mercury, in units of pounds per million Btu of heat input for that calendar month.

Er = Emission rate (as determined during the most recent compliance demonstration of particulate matter, hydrogen chloride, or mercury from unit, i, in units of pounds per million Btu of heat input. Determine the emission rate for particulate matter, hydrogen chloride, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for hydrogen chloride or mercury using the applicable equation in §63.7530(c).

Sa = Actual steam generation for that calendar month by boiler, i, in units of pounds.

Cfi = Conversion factor, as calculated during the most recent compliance test, in units of million Btu of heat input per pounds of steam generated for boiler, i.

1.1 = Required discount factor.

(3) Until 12 monthly weighted average emission rates have been accumulated, calculate and report only the average weighted emission rate determined under paragraph (f)(1) or (2) of this section for each calendar month. After 12 monthly weighted average emission rates have been accumulated, for each subsequent calendar month, use Equation 5 of this section to calculate the 12-month rolling average of the monthly weighted average emission rates for the current calendar month and the previous 11 calendar months.

$$Eavg = \sum_{i=1}^{n} ERi \div 12 \qquad \text{(Eq. 5)}$$

Where:

Eavg = 12-month rolling average emission rate, (pounds per million Btu heat input)

ERi = Monthly weighted average, for calendar month “i” (pounds per million Btu heat input), as calculated by paragraph (f)(1) or (2) of this section.

(g) You must develop, and submit to the applicable delegated authority for review and approval, an implementation plan for emission averaging according to the following procedures and requirements in paragraphs (g)(1) through (4) of this section.

(1) You must submit the implementation plan no later than 180 days before the date that the facility intends to demonstrate compliance using the emission averaging option.

(2) You must include the information contained in paragraphs (g)(2)(i) through (vii) of this section in your implementation plan for all emission sources included in an emissions average:

(i) The identification of all existing boilers and process heaters in the averaging group, including for each either the applicable HAP emission level or the control technology installed as of May 20, 2011 and the date on which you are requesting emission averaging to commence;

(ii) The process parameter (heat input or steam generated) that will be monitored for each averaging group;

(iii) The specific control technology or pollution prevention measure to be used for each emission boiler or process heater in the averaging group and the date of its installation or application. If the pollution prevention measure reduces or eliminates emissions from multiple boilers or process heaters, the owner or operator must identify each boiler or process heater;

(iv) The test plan for the measurement of particulate matter, hydrogen chloride, or mercury emissions in accordance with the requirements in §63.7520;

(v) The operating parameters to be monitored for each control system or device consistent with §63.7500 and Table 4, and a description of how the operating limits will be determined;

(vi) If you request to monitor an alternative operating parameter pursuant to §63.7525, you must also include:

(A) A description of the parameter(s) to be monitored and an explanation of the criteria used to select the parameter(s); and

(B) A description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation of the control device; the frequency and content of monitoring, reporting, and recordkeeping requirements; and a demonstration, to the satisfaction of the applicable delegated authority, that the proposed monitoring frequency is sufficient to represent control device operating conditions; and

(vii) A demonstration that compliance with each of the applicable emission limit(s) will be achieved under representative operating load conditions. Following each compliance demonstration and until the next compliance demonstration, you must comply with the operating limit for operating load conditions specified in Table 4 to this subpart.

(3) The delegated authority shall review and approve or disapprove the plan according to the following criteria:

(i) Whether the content of the plan includes all of the information specified in paragraph (g)(2) of this section; and

(ii) Whether the plan presents sufficient information to determine that compliance will be achieved and maintained.

(4) The applicable delegated authority shall not approve an emission averaging implementation plan containing any of the following provisions:

(i) Any averaging between emissions of differing pollutants or between differing sources; or

(ii) The inclusion of any emission source other than an existing unit in the same subcategory.

(h) For a group of two or more existing affected units, each of which vents through a single common stack, you may average particulate matter, hydrogen chloride, or mercury emissions to demonstrate compliance with the limits for that pollutant in Table 2 to this subpart if you satisfy the requirements in paragraph (i) or (j) of this section.

(i) For a group of two or more existing units in the same subcategory, each of which vents through a common emissions control system to a common stack, that does not receive emissions from units in other subcategories or categories, you may treat such averaging group as a single existing unit for purposes of this subpart and comply with the requirements of this subpart as if the group were a single unit.

(j) For all other groups of units subject to the common stack requirements of paragraph (h) of this section, including situations where the exhaust of affected units are each individually controlled and then sent to a common stack, the owner or operator may elect to:

(1) Conduct performance tests according to procedures specified in §63.7520 in the common stack if affected units from other subcategories vent to the common stack. The emission limits that the group must comply with are determined by the use of Equation 6 of this section.

$$En = \sum_{i=1}^{n} (ELi \times Hi) \div \sum_{i=1}^{n} Hi \quad \text{(Eq. 6)}$$

Where:

En = HAP emission limit, pounds per million British thermal units (lb/MMBtu), parts per million (ppm), or nanograms per dry standard cubic meter (ng/dscm).

ELi = Appropriate emission limit from Table 2 to this subpart for unit i, in units of lb/MMBtu, ppm or ng/dscm.

Hi = Heat input from unit i, MMBtu.

(2) Conduct performance tests according to procedures specified in §63.7520 in the common stack. If affected units and non-affected units vent to the common stack, the non-affected units must be shut down or vented to a different stack during the performance test unless the facility determines to demonstrate compliance with the non-affected units venting to the stack; and

(3) Meet the applicable operating limit specified in §63.7540 and Table 8 to this subpart for each emissions control system (except that, if each unit venting to the common stack has an applicable opacity operating limit, then a single continuous opacity monitoring system may be located in the common stack instead of in each duct to the common stack).

(k) The common stack of a group of two or more existing boilers or process heaters in the same subcategory subject to paragraph (h) of this section may be treated as a separate stack for purposes of paragraph (b) of this section and included in an emissions averaging group subject to paragraph (b) of this section.

§ 63.7525 What are my monitoring, installation, operation, and maintenance requirements?

(a) If your boiler or process heater is subject to a carbon monoxide emission limit in Table 1, 2, or 12 to this subpart, you must install, operate, and maintain a continuous oxygen monitor according to the procedures in paragraphs (a)(1) through (6) of this section by the compliance date specified in §63.7495. The oxygen level shall be monitored at the outlet of the boiler or process heater.

(1) Each CEMS for oxygen (O_2CEMS) must be installed, operated, and maintained according to the applicable procedures under Performance Specification 3 at 40 CFR part 60, appendix B, and according to the site-specific monitoring plan developed according to §63.7505(d).

(2) You must conduct a performance evaluation of each O_2CEMS according to the requirements in §63.8(e) and according to Performance Specification 3 at 40 CFR part 60, appendix B.

(3) Each O_2CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(4) The O_2CEMS data must be reduced as specified in §63.8(g)(2).

(5) You must calculate and record 12-hour block average concentrations for each operating day.

(6) For purposes of calculating data averages, you must use all the data collected during all periods in assessing compliance, excluding data collected during periods when the monitoring system malfunctions or is out of control, during associated repairs, and during required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments). Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system malfunctions or is out of control and data are not available for a required calculation constitutes a deviation from the monitoring requirements. Periods when data are unavailable because of required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments) do not constitute monitoring deviations.

(b) If your boiler or process heater has a heat input capacity of greater than 250 MMBtu per hour and combusts coal, biomass, or residual oil, you must install, certify, maintain, and operate a CEMS measuring PM emissions discharged to the atmosphere and record the output of the system as specified in paragraphs (b)(1) through (5) of this section.

(1) Each CEMS shall be installed, certified, operated, and maintained according to the requirements in §63.7540(a)(9).

(2) For a new unit, the initial performance evaluation shall be completed no later than November 16, 2011 or 180 days after the date of initial startup, whichever is later. For an existing unit, the initial performance evaluation shall be completed no later than September 17, 2014.

(3) Compliance with the applicable emissions limit shall be determined based on the 30-day rolling average of the hourly arithmetic average emissions concentrations using the continuous monitoring system outlet data. The 30-day rolling arithmetic average emission concentration shall be calculated using EPA Reference Method 19 at 40 CFR part 60, appendix A–7.

(4) Collect CEMS hourly averages for all operating hours on a 30-day rolling average basis. Collect at least four CMS data values representing the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CMS calibration, quality assurance, or maintenance activities are being performed.

(5) The 1-hour arithmetic averages required shall be expressed in lb/MMBtu and shall be used to calculate the boiler operating day daily arithmetic average emissions.

(c) If you have an applicable opacity operating limit in this rule, and are not otherwise required to install and operate a PM CEMS or a bag leak detection system, you must install, operate, certify and maintain each COMS according to the procedures in paragraphs (c)(1) through (7) of this section by the compliance date specified in §63.7495.

(1) Each COMS must be installed, operated, and maintained according to Performance Specification 1 at appendix B to part 60 of this chapter.

(2) You must conduct a performance evaluation of each COMS according to the requirements in §63.8(e) and according to Performance Specification 1 at appendix B to part 60 of this chapter.

(3) As specified in §63.8(c)(4)(i), each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(4) The COMS data must be reduced as specified in §63.8(g)(2).

(5) You must include in your site-specific monitoring plan procedures and acceptance criteria for operating and maintaining each COMS according to the requirements in §63.8(d). At a minimum, the monitoring plan must include a daily calibration drift assessment, a quarterly performance audit, and an annual zero alignment audit of each COMS.

(6) You must operate and maintain each COMS according to the requirements in the monitoring plan and the requirements of §63.8(e). You must identify periods the COMS is out of control including any periods that the COMS fails to pass a daily calibration drift assessment, a quarterly performance audit, or an annual zero alignment audit. Any 6-minute period for which the monitoring system is out of control and data are not available for a required calculation constitutes a deviation from the monitoring requirements.

(7) You must determine and record all the 6-minute averages (and daily block averages as applicable) collected for periods during which the COMS is not out of control.

(d) If you have an operating limit that requires the use of a CMS, you must install, operate, and maintain each continuous parameter monitoring system according to the procedures in paragraphs (d)(1) through (5) of this section by the compliance date specified in §63.7495.

(1) The continuous parameter monitoring system must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data.

(2) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must conduct all monitoring in continuous operation at all times that the unit is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(3) For purposes of calculating data averages, you must not use data recorded during monitoring malfunctions, associated repairs, out of control periods, or required quality assurance or control activities. You must use all the data collected during all other periods in assessing compliance. Any 15-minute period for which the monitoring system is out-of-control and data are not available for a required calculation constitutes a deviation from the monitoring requirements.

(4) You must determine the 4-hour block average of all recorded readings, except as provided in paragraph (d)(3) of this section.

(5) You must record the results of each inspection, calibration, and validation check.

(e) If you have an operating limit that requires the use of a flow monitoring system, you must meet the requirements in paragraphs (d) and (e)(1) through (4) of this section.

(1) You must install the flow sensor and other necessary equipment in a position that provides a representative flow.

(2) You must use a flow sensor with a measurement sensitivity of no greater than 2 percent of the expected flow rate.

(3) You must minimize the effects of swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(4) You must conduct a flow monitoring system performance evaluation in accordance with your monitoring plan at the time of each performance test but no less frequently than annually. (f) If you have an operating limit that requires the use of a pressure monitoring system, you must meet the requirements in paragraphs (d) and (f)(1) through (6) of this section.

(1) Install the pressure sensor(s) in a position that provides a representative measurement of the pressure (*e.g.* , PM scrubber pressure drop).

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(3) Use a pressure sensor with a minimum tolerance of 1.27 centimeters of water or a minimum tolerance of 1 percent of the pressure monitoring system operating range, whichever is less.

(4) Perform checks at least once each process operating day to ensure pressure measurements are not obstructed (*e.g.* , check for pressure tap pluggage daily).

(5) Conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(6) If at any time the measured pressure exceeds the manufacturer's specified maximum operating pressure range, conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan and confirm that the pressure monitoring system continues to meet the performance requirements in you monitoring plan. Alternatively, install and verify the operation of a new pressure sensor.

(g) If you have an operating limit that requires a pH monitoring system, you must meet the requirements in paragraphs (d) and (g)(1) through (4) of this section.

(1) Install the pH sensor in a position that provides a representative measurement of scrubber effluent pH.

(2) Ensure the sample is properly mixed and representative of the fluid to be measured.

(3) Conduct a performance evaluation of the pH monitoring system in accordance with your monitoring plan at least once each process operating day.

(4) Conduct a performance evaluation (including a two-point calibration with one of the two buffer solutions having a pH within 1 of the pH of the operating limit) of the pH monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than quarterly.

(h) If you have an operating limit that requires a secondary electric power monitoring system for an electrostatic precipitator (ESP) operated with a wet scrubber, you must meet the requirements in paragraphs (h)(1) and (2) of this section.

(1) Install sensors to measure (secondary) voltage and current to the precipitator collection plates.

(2) Conduct a performance evaluation of the electric power monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(i) If you have an operating limit that requires the use of a monitoring system to measure sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), you must meet the requirements in paragraphs (d) and (i)(1) through (2) of this section.

(1) Install the system in a position(s) that provides a representative measurement of the total sorbent injection rate.

(2) Conduct a performance evaluation of the sorbent injection rate monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(j) If you are not required to use a PM CEMS and elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate the bag leak detection system as specified in paragraphs (j)(1) through (7) of this section.

(1) You must install a bag leak detection sensor(s) in a position(s) that will be representative of the relative or absolute particulate matter loadings for each exhaust stack, roof vent, or compartment (*e.g.,* for a positive pressure fabric filter) of the fabric filter.

(2) Conduct a performance evaluation of the bag leak detection system in accordance with your monitoring plan and consistent with the guidance provided in EPA–454/R–98–015 (incorporated by reference, *see* §63.14).

(3) Use a bag leak detection system certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less.

(4) Use a bag leak detection system equipped with a device to record continuously the output signal from the sensor.

(5) Use a bag leak detection system equipped with a system that will alert when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located where it can be easily heard or seen by plant operating personnel.

(7) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

(k) For each unit that meets the definition of limited-use boiler or process heater, you must monitor and record the operating hours per year for that unit.

§ 63.7530 How do I demonstrate initial compliance with the emission limitations, fuel specifications and work practice standards?

(a) You must demonstrate initial compliance with each emission limit that applies to you by conducting initial performance tests and fuel analyses and establishing operating limits, as applicable, according to §63.7520, paragraphs (b) and (c) of this section, and Tables 5 and 7 to this subpart. If applicable, you must also install, and operate, maintain all applicable CMS (including CEMS, COMS, and continuous parameter monitoring systems) according to §63.7525.

(b) If you demonstrate compliance through performance testing, you must establish each site-specific operating limit in Table 4 to this subpart that applies to you according to the requirements in §63.7520, Table 7 to this subpart, and paragraph (b)(3) of this section, as applicable. You must also conduct fuel analyses according to §63.7521 and establish maximum fuel pollutant input levels according to paragraphs (b)(1) and (2) of this section, as applicable. As specified in §63.7510(a), if your affected source burns a single type of fuel (excluding supplemental fuels used for unit startup, shutdown, or transient flame stabilization), you are not required to perform the initial fuel analysis for each type of fuel burned in your boiler or process heater. However, if you switch fuel(s) and cannot show that the new fuel(s) do (does) not increase the chlorine or mercury input into the unit through the results of fuel analysis, then you must repeat the performance test to demonstrate compliance while burning the new fuel(s).

(1) You must establish the maximum chlorine fuel input (Clinput) during the initial fuel analysis according to the procedures in paragraphs (b)(1)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.

(ii) During the fuel analysis for hydrogen chloride, you must determine the fraction of the total heat input for each fuel type burned (Qi) based on the fuel mixture that has the highest content of chlorine, and the average chlorine concentration of each fuel type burned (Ci).

(iii) You must establish a maximum chlorine input level using Equation 7 of this section.

$$Clinput = \sum_{i=1}^{n} (Ci \times Qi) \quad \text{(Eq. 7)}$$

Where:

Clinput = Maximum amount of chlorine entering the boiler or process heater through fuels burned in units of pounds per million Btu.

Ci = Arithmetic average concentration of chlorine in fuel type, i, analyzed according to §63.7521, in units of pounds per million Btu.

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types during the performance testing, it is not necessary to determine the value of this term. Insert a value of “1” for Qi.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.

(2) You must establish the maximum mercury fuel input level (Mercuryinput) during the initial fuel analysis using the procedures in paragraphs (b)(2)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of mercury.

(ii) During the compliance demonstration for mercury, you must determine the fraction of total heat input for each fuel burned (Qi) based on the fuel mixture that has the highest content of mercury, and the average mercury concentration of each fuel type burned (HGi).

(iii) You must establish a maximum mercury input level using Equation 8 of this section.

$$Mercuryinput = \sum_{i=1}^{n} (HGi \times Qi) \qquad \text{(Eq. 8)}$$

Where:

Mercuryinput = Maximum amount of mercury entering the boiler or process heater through fuels burned in units of pounds per million Btu.

HGi = Arithmetic average concentration of mercury in fuel type, i, analyzed according to §63.7521, in units of pounds per million Btu.

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of “1” for Qi.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of mercury.

(3) You must establish parameter operating limits according to paragraphs (b)(3)(i) through (iv) of this section.

(i) For a wet scrubber, you must establish the minimum scrubber effluent pH, liquid flowrate, and pressure drop as defined in §63.7575, as your operating limits during the three-run performance test. If you use a wet scrubber and you conduct separate performance tests for particulate matter, hydrogen chloride, and mercury emissions, you must establish one set of minimum scrubber effluent pH, liquid flowrate, and pressure drop operating limits. The minimum scrubber effluent pH operating limit must be established during the hydrogen chloride performance test. If you conduct multiple performance tests, you must set the minimum liquid flowrate and pressure drop operating limits at the highest minimum values established during the performance tests.

(ii) For an electrostatic precipitator operated with a wet scrubber, you must establish the minimum voltage and secondary amperage (or total power input), as defined in §63.7575, as your operating limits during the three-run performance test. (These operating limits do not apply to electrostatic precipitators that are operated as dry controls without a wet scrubber.)

(iii) For a dry scrubber, you must establish the minimum sorbent injection rate for each sorbent, as defined in §63.7575, as your operating limit during the three-run performance test.

(iv) For activated carbon injection, you must establish the minimum activated carbon injection rate, as defined in §63.7575, as your operating limit during the three-run performance test.

(v) The operating limit for boilers or process heaters with fabric filters that demonstrate continuous compliance through bag leak detection systems is that a bag leak detection system be installed according to the requirements in §63.7525, and that each fabric filter must be operated such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month period.

(c) If you elect to demonstrate compliance with an applicable emission limit through fuel analysis, you must conduct fuel analyses according to §63.7521 and follow the procedures in paragraphs (c)(1) through (4) of this section.

(1) If you burn more than one fuel type, you must determine the fuel mixture you could burn in your boiler or process heater that would result in the maximum emission rates of the pollutants that you elect to demonstrate compliance through fuel analysis.

(2) You must determine the 90th percentile confidence level fuel pollutant concentration of the composite samples analyzed for each fuel type using the one-sided z-statistic test described in Equation 9 of this section.

$$P90 = mean + (SD \times t) \quad \text{(Eq. 9)}$$

Where:

P90 = 90th percentile confidence level pollutant concentration, in pounds per million Btu.

Mean = Arithmetic average of the fuel pollutant concentration in the fuel samples analyzed according to §63.7521, in units of pounds per million Btu.

SD = Standard deviation of the pollutant concentration in the fuel samples analyzed according to §63.7521, in units of pounds per million Btu.

T = t distribution critical value for 90th percentile (0.1) probability for the appropriate degrees of freedom (number of samples minus one) as obtained from a Distribution Critical Value Table.

(3) To demonstrate compliance with the applicable emission limit for hydrogen chloride, the hydrogen chloride emission rate that you calculate for your boiler or process heater using Equation 10 of this section must not exceed the applicable emission limit for hydrogen chloride.

$$HCl = \sum_{i=1}^{n} (Ci90 \times Qi \times 1.028) \quad \text{(Eq. 10)}$$

Where:

HCl = Hydrogen chloride emission rate from the boiler or process heater in units of pounds per million Btu.

Ci90 = 90th percentile confidence level concentration of chlorine in fuel type, i, in units of pounds per million Btu as calculated according to Equation 9 of this section.

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of “1” for Qi.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.

1.028 = Molecular weight ratio of hydrogen chloride to chlorine.

(4) To demonstrate compliance with the applicable emission limit for mercury, the mercury emission rate that you calculate for your boiler or process heater using Equation 11 of this section must not exceed the applicable emission limit for mercury.

$$Mercury = \sum_{i=1}^{n} (Hgi90 \times Qi) \qquad \text{(Eq. 11)}$$

Where:

Mercury = Mercury emission rate from the boiler or process heater in units of pounds per million Btu.

Hgi90 = 90th percentile confidence level concentration of mercury in fuel, i, in units of pounds per million Btu as calculated according to Equation 9 of this section.

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of “1” for Qi.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest mercury content.

(d) If you own or operate an existing unit with a heat input capacity of less than 10 million Btu per hour, you must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted a tune-up of the unit.

(e) You must include with the Notification of Compliance Status a signed certification that the energy assessment was completed according to Table 3 to this subpart and is an accurate depiction of your facility.

(f) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.7545(e).

(g) If you elect to demonstrate that a gaseous fuel meets the specifications of an other gas 1 fuel as defined in §63.7575, you must conduct an initial fuel specification analyses according to §63.7521(f) through (i). If the mercury and hydrogen sulfide constituents in the gaseous fuels will never exceed the specifications included in the definition, you will include a signed certification with the Notification of Compliance Status that the initial fuel specification test meets the gas specifications outlined in the definition of other gas 1 fuels. If your gas constituents could vary above the specifications, you will conduct monthly testing according to the procedures in §63.7521(f) through (i) and §63.7540(c) and maintain records of the results of the testing as outlined in §63.7555(g).

(h) If you own or operate a unit subject emission limits in Tables 1, 2, or 12 of this subpart, you must minimize the unit's startup and shutdown periods following the manufacturer's recommended procedures, if available. If manufacturer's recommended procedures are not available, you must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available. You must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a unit of similar design if manufacturer's recommended procedures are not available.

§ 63.7533 Can I use emission credits earned from implementation of energy conservation measures to comply with this subpart?

(a) If you elect to comply with the alternative equivalent steam output-based emission limits, instead of the heat input-based limits, listed in Tables 1 and 2 of this subpart and you want to take credit for implementing energy conservation measures identified in an energy assessment, you may demonstrate compliance using emission reduction credits according to the procedures in this section. Owners or operators using this compliance approach must establish an emissions benchmark, calculate and document the emission credits, develop an Implementation Plan, comply with the general reporting requirements, and apply the emission credit according to the procedures in paragraphs (b) through (f) of this section.

(b) For each existing affected boiler for which you intend to apply emissions credits, establish a benchmark from which emission reduction credits may be generated by determining the actual annual fuel heat input to the affected boiler before initiation of an energy conservation activity to reduce energy demand (*i.e.,* fuel usage) according to paragraphs (b)(1) through (4) of this section. The benchmark shall be expressed in trillion Btu per year heat input.

(1) The benchmark from which emission credits may be generated shall be determined by using the most representative, accurate, and reliable process available for the source. The benchmark shall be established for a one-year period before the date that an energy demand reduction occurs, unless it can be demonstrated that a different time period is more representative of historical operations.

(2) Determine the starting point from which to measure progress. Inventory all fuel purchased and generated on-site (off-gases, residues) in physical units (MMBtu, million cubic feet, etc.).

(3) Document all uses of energy from the affected boiler. Use the most recent data available.

(4) Collect non-energy related facility and operational data to normalize, if necessary, the benchmark to current operations, such as building size, operating hours, etc. Use actual, not estimated, use data, if possible and data that are current and timely.

(c) Emissions credits can be generated if the energy conservation measures were implemented after January 14, 2011 and if sufficient information is available to determine the appropriate value of credits.

(1) The following emission points cannot be used to generate emissions averaging credits:

(i) Energy conservation measures implemented on or before January 14, 2011, unless the level of energy demand reduction is increased after January 14, 2011, in which case credit will be allowed only for change in demand reduction achieved after January 14, 2011.

(ii) Emission credits on shut-down boilers. Boilers that are shut down cannot be used to generate credits.

(2) For all points included in calculating emissions credits, the owner or operator shall:

(i) Calculate annual credits for all energy demand points. Use Equation 12 to calculate credits. Energy conservation measures that meet the criteria of paragraph (c)(1) of this section shall not be included, except as specified in paragraph (c)(1)(i) of this section.

(3) Credits are generated by the difference between the benchmark that is established for each affected boiler, and the actual energy demand reductions from energy conservation measures implemented after January 14, 2011. Credits shall be calculated using Equation 12 of this section as follows:

(i) The overall equation for calculating credits is:

$$Credits = \sum_{i=1}^{n} EIS_{iactual} \div EI_{baseline} \quad \text{(Eq. 12)}$$

Where:

Credits = Energy Input Savings for all energy conservation measures implemented for an affected boiler, million Btu per year.

$EIS_{iactual}$= Energy Input Savings for each energy conservation measure implemented for an affected boiler, million Btu per year.

$EI_{baseline}$= Energy Input for the affected boiler, million Btu.

n = Number of energy conservation measures included in the emissions credit for the affected boiler.

(d) The owner or operator shall develop and submit for approval an Implementation Plan containing all of the information required in this paragraph for all boilers to be included in an emissions credit approach. The Implementation Plan shall identify all existing affected boilers to be included in applying the emissions credits. The Implementation Plan shall include a description of the energy conservation measures implemented and the energy savings generated from each measure and an explanation of the criteria used for determining that savings. You must submit the implementation plan for emission credits to the applicable delegated authority for review and approval no later than 180 days before the date on which the facility intends to demonstrate compliance using the emission credit approach.

(e) The emissions rate from each existing boiler participating in the emissions credit option must be in compliance with the limits in Table 2 to this subpart at all times following the compliance date specified in §63.7495.

(f) You must demonstrate initial compliance according to paragraph (f)(1) or (2) of this section.

(1) You must use Equation 13 of this section to demonstrate that the emissions from the affected boiler participating in the emissions credit compliance approach do not exceed the emission limits in Table 2 to this subpart.

$$E_{adj} = E_m \times (1 - EC) \quad \text{(Eq. 13)}$$

Where:

E_{adj}= Emission level adjusted applying the emission credits earned, lb per million Btu steam output for the affected boiler.

E_m= Emissions measured during the performance test, lb per million Btu steam output for the affected boiler.

EC = Emission credits from equation 12 for the affected boiler.

Continuous Compliance Requirements

§ 63.7535 How do I monitor and collect data to demonstrate continuous compliance?

(a) You must monitor and collect data according to this section and the site-specific monitoring plan required by §63.7505(d).

(b) You must operate the monitoring system and collect data at all required intervals at all times that the affected source is operating, except for periods of monitoring system malfunctions or out of control periods (*see* §63.8(c)(7) of this part), and required monitoring system quality assurance or control activities, including, as applicable, calibration checks and required zero and span adjustments. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. You are required to effect monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable.

(c) You may not use data recorded during monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or control activities in data averages and calculations used to report emissions or operating levels. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

(d) Except for periods of monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments, failure to collect required data is a deviation of the monitoring requirements.

§ 63.7540 How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?

(a) You must demonstrate continuous compliance with each emission limit, operating limit, and work practice standard in Tables 1 through 3 to this subpart that applies to you according to the methods specified in Table 8 to this subpart and paragraphs (a)(1) through (11) of this section.

(1) Following the date on which the initial compliance demonstration is completed or is required to be completed under §§63.7 and 63.7510, whichever date comes first, operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits listed in Table 4 of this subpart except during performance tests conducted to determine compliance with the emission limits or to establish new operating limits. Operating limits must be confirmed or reestablished during performance tests.

(2) As specified in §63.7550(c), you must keep records of the type and amount of all fuels burned in each boiler or process heater during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would either result in lower emissions of hydrogen chloride and mercury than the applicable emission limit for each pollutant (if you demonstrate compliance through fuel analysis), or result in lower fuel input of chlorine and mercury than the maximum values calculated during the last performance test (if you demonstrate compliance through performance testing).

(3) If you demonstrate compliance with an applicable hydrogen chloride emission limit through fuel analysis and you plan to burn a new type of fuel, you must recalculate the hydrogen chloride emission rate using Equation 9 of §63.7530 according to paragraphs (a)(3)(i) through (iii) of this section.

(i) You must determine the chlorine concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of chlorine.

(iii) Recalculate the hydrogen chloride emission rate from your boiler or process heater under these new conditions using Equation 10 of §63.7530. The recalculated hydrogen chloride emission rate must be less than the applicable emission limit.

(4) If you demonstrate compliance with an applicable hydrogen chloride emission limit through performance testing and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum chlorine input using Equation 7 of §63.7530. If the results of recalculating the maximum chlorine input using Equation 7 of §63.7530 are greater than the maximum chlorine input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the hydrogen chloride emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(b).

(5) If you demonstrate compliance with an applicable mercury emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the mercury emission rate using Equation 11 of §63.7530 according to the procedures specified in paragraphs (a)(5)(i) through (iii) of this section.

(i) You must determine the mercury concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of mercury.

(iii) Recalculate the mercury emission rate from your boiler or process heater under these new conditions using Equation 11 of §63.7530. The recalculated mercury emission rate must be less than the applicable emission limit.

(6) If you demonstrate compliance with an applicable mercury emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum mercury input using Equation 8 of §63.7530. If the results of recalculating the maximum mercury input using Equation 8 of §63.7530 are higher than the maximum mercury input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the mercury emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(b).

(7) If your unit is controlled with a fabric filter, and you demonstrate continuous compliance using a bag leak detection system, you must initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions as soon as practical, and operate and maintain the fabric filter system such that the alarm does not sound more than 5 percent of the operating time during a 6-month period. You must also keep records of the date, time, and duration of each alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken. You must also record the percent of the operating time during each 6-month period that the alarm sounds. In calculating this operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If you take longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken to initiate corrective action.

(8) [Reserved]

(9) The owner or operator of an affected source using a CEMS measuring PM emissions to meet requirements of this subpart shall install, certify, operate, and maintain the PM CEMS as specified in paragraphs (a)(9)(i) through (a)(9)(iv) of this section.

(i) The owner or operator shall conduct a performance evaluation of the PM CEMS according to the applicable requirements of §60.13, and Performance Specification 11 at 40 CFR part 60, appendix B of this chapter.

(ii) During each PM correlation testing run of the CEMS required by Performance Specification 11 at 40 CFR part 60, appendix B of this chapter, PM and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30-to 60-minute period) by both the CEMS and conducting performance tests using Method 5 or 5B at 40 CFR part 60, appendix A–3 or Method 17 at 40 CFR part 60, appendix A–6 of this chapter.

(iii) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 2 at 40 CFR part 60, appendix F of this chapter. Relative Response Audits must be performed annually and Response Correlation Audits must be performed every 3 years.

(iv) After December 31, 2011, within 60 days after the date of completing each CEMS relative accuracy test audit or performance test conducted to demonstrate compliance with this subpart, you must submit the relative accuracy test audit data and performance test data to EPA by successfully submitting the data electronically into EPA's Central Data Exchange by using the Electronic Reporting Tool (see *http://www.epa.gov/ttn/chief/ert/ert tool.html/*).

(10) If your boiler or process heater is in either the natural gas, refinery gas, other gas 1, or Metal Process Furnace subcategories and has a heat input capacity of 10 million Btu per hour or greater, you must conduct a tune-up of the boiler or process heater annually to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (a)(10)(vi) of this section. This requirement does not apply to limited-use boilers and process heaters, as defined in §63.7575.

(i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown, but you must inspect each burner at least once every 36 months);

(ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

(iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly;

(iv) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available;

(v) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made); and

(vi) Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (a)(10)(vi)(A) through (C) of this section,

(A) The concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured before and after the adjustments of the boiler;

(B) A description of any corrective actions taken as a part of the combustion adjustment; and

(C) The type and amount of fuel used over the 12 months prior to the annual adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

(11) If your boiler or process heater has a heat input capacity of less than 10 million Btu per hour, or meets the definition of limited-use boiler or process heater in §63.7575, you must conduct a biennial tune-up of the boiler or process heater as specified in paragraphs (a)(10)(i) through (a)(10)(vi) of this section to demonstrate continuous compliance.

(12) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of startup.

(b) You must report each instance in which you did not meet each emission limit and operating limit in Tables 1 through 4 to this subpart that apply to you. These instances are deviations from the emission limits in this subpart. These deviations must be reported according to the requirements in §63.7550.

(c) If you elected to demonstrate that the unit meets the specifications for hydrogen sulfide and mercury for the other gas 1 subcategory and you cannot submit a signed certification under §63.7545(g) because the constituents could exceed the specifications, you must conduct monthly fuel specification testing of the gaseous fuels, according to the procedures in §63.7521(f) through (i).

§ 63.7541 How do I demonstrate continuous compliance under the emissions averaging provision?

(a) Following the compliance date, the owner or operator must demonstrate compliance with this subpart on a continuous basis by meeting the requirements of paragraphs (a)(1) through (5) of this section.

(1) For each calendar month, demonstrate compliance with the average weighted emissions limit for the existing units participating in the emissions averaging option as determined in §63.7522(f) and (g).

(2) You must maintain the applicable opacity limit according to paragraphs (a)(2)(i) and (ii) of this section.

(i) For each existing unit participating in the emissions averaging option that is equipped with a dry control system and not vented to a common stack, maintain opacity at or below the applicable limit.

(ii) For each group of units participating in the emissions averaging option where each unit in the group is equipped with a dry control system and vented to a common stack that does not receive emissions from non-affected units, maintain opacity at or below the applicable limit at the common stack.

(3) For each existing unit participating in the emissions averaging option that is equipped with a wet scrubber, maintain the 3-hour average parameter values at or below the operating limits established during the most recent performance test.

(4) For each existing unit participating in the emissions averaging option that has an approved alternative operating plan, maintain the 3-hour average parameter values at or below the operating limits established in the most recent performance test.

(5) For each existing unit participating in the emissions averaging option venting to a common stack configuration containing affected units from other subcategories, maintain the appropriate operating limit for each unit as specified in Table 4 to this subpart that applies.

(b) Any instance where the owner or operator fails to comply with the continuous monitoring requirements in paragraphs (a)(1) through (5) of this section is a deviation.

Notification, Reports, and Records

§ 63.7545 What notifications must I submit and when?

(a) You must submit to the delegated authority all of the notifications in §63.7(b) and (c), §63.8(e), (f)(4) and (6), and §63.9(b) through (h) that apply to you by the dates specified.

(b) As specified in §63.9(b)(2), if you startup your affected source before May 20, 2011, you must submit an Initial Notification not later than 120 days after May 20, 2011.

(c) As specified in §63.9(b)(4) and (b)(5), if you startup your new or reconstructed affected source on or after May 20, 2011, you must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

(d) If you are required to conduct a performance test you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin.

(e) If you are required to conduct an initial compliance demonstration as specified in §63.7530(a), you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). For the initial compliance demonstration for each affected source, you must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for the affected source according to §63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (8), as applicable.

(1) A description of the affected unit(s) including identification of which subcategory the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit, description of the fuel(s) burned, including whether the fuel(s) were determined by you or EPA through a petition process to be a non-waste under §241.3, whether the fuel(s) were processed from discarded non-hazardous secondary materials within the meaning of §241.3, and justification for the selection of fuel(s) burned during the compliance demonstration.

(2) Summary of the results of all performance tests and fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits.

(3) A summary of the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable emission standard in Table 1, 2, or 12 to this subpart.

(4) Identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis.

(5) Identification of whether you plan to demonstrate compliance by emissions averaging and identification of whether you plan to demonstrate compliance by using emission credits through energy conservation:

(i) If you plan to demonstrate compliance by emission averaging, report the emission level that was being achieved or the control technology employed on May 20, 2011.

(6) A signed certification that you have met all applicable emission limits and work practice standards.

(7) If you had a deviation from any emission limit, work practice standard, or operating limit, you must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.

(8) In addition to the information required in §63.9(h)(2), your notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official:

(i) “This facility complies with the requirements in §63.7540(a)(10) to conduct an annual or biennial tune-up, as applicable, of each unit.”

(ii) “This facility has had an energy assessment performed according to §63.7530(e).”

(iii) Except for units that qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act, include the following: “No secondary materials that are solid waste were combusted in any affected unit.”

(f) If you operate a unit designed to burn natural gas, refinery gas, or other gas 1 fuels that is subject to this subpart, and you intend to use a fuel other than natural gas, refinery gas, or other gas 1 fuel to fire the affected unit during a period of natural gas curtailment or supply interruption, as defined in §63.7575, you must submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in §63.7575. The notification must include the information specified in paragraphs (f)(1) through (5) of this section.

(1) Company name and address.

(2) Identification of the affected unit.

(3) Reason you are unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared or the natural gas supply interruption began.

(4) Type of alternative fuel that you intend to use.

(5) Dates when the alternative fuel use is expected to begin and end.

(g) If you intend to commence or recommence combustion of solid waste, you must provide 30 days prior notice of the date upon which you will commence or recommence combustion of solid waste. The notification must identify:

(1) The name of the owner or operator of the affected source, the location of the source, the boiler(s) or process heater(s) that will commence burning solid waste, and the date of the notice.

(2) The currently applicable subcategory under this subpart.

(3) The date on which you became subject to the currently applicable emission limits.

(4) The date upon which you will commence combusting solid waste.

(h) If you intend to switch fuels, and this fuel switch may result in the applicability of a different subcategory, you must provide 30 days prior notice of the date upon which you will switch fuels. The notification must identify:

(1) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that will switch fuels, and the date of the notice.

(2) The currently applicable subcategory under this subpart.

(3) The date on which you became subject to the currently applicable standards.

(4) The date upon which you will commence the fuel switch.

§ 63.7550 What reports must I submit and when?

(a) You must submit each report in Table 9 to this subpart that applies to you.

(b) Unless the EPA Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 9 to this subpart and according to the requirements in paragraphs (b)(1) through (5) of this section. For units that are subject only to a requirement to conduct an annual or biennial tune-up according to §63.7540(a)(10) or (a)(11), respectively, and not subject to emission limits or operating limits, you may submit only an annual or biennial compliance report, as applicable, as specified in paragraphs (b)(1) through (5) of this section, instead of a semi-annual compliance report.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7495 and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days (or 1 or 2 year, as applicable, if submitting an annual or biennial compliance report) after the compliance date that is specified for your source in §63.7495.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.7495. The first annual or biennial compliance report must be postmarked no later than January 31.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Annual and biennial compliance reports must cover the applicable one or two year periods from January 1 to December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. Annual and biennial compliance reports must be postmarked no later than January 31.

(5) For each affected source that is subject to permitting regulations pursuant to part 70 or part 71 of this chapter, and if the delegated authority has established dates for submitting semiannual reports pursuant to §70.6(a)(3)(iii)(A) or §71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the delegated authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain the information required in paragraphs (c)(1) through (13) of this section.

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual (or annual or biennial) reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by EPA or your basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure.

(5) A summary of the results of the annual performance tests for affected sources subject to an emission limit, a summary of any fuel analyses associated with performance tests, and documentation of any operating limits that were reestablished during this test, if applicable. If you are conducting performance tests once every 3 years consistent with §63.7515(b) or (c), the date of the last 2 performance tests, a comparison of the emission level you achieved in the last 2 performance tests to the 75 percent emission limit threshold required in §63.7515(b) or (c), and a statement as to whether there have been any operational changes since the last performance test that could increase emissions.

(6) A signed statement indicating that you burned no new types of fuel in an affected source subject to an emission limit. Or, if you did burn a new type of fuel and are subject to a hydrogen chloride emission limit, you must submit the calculation of chlorine input, using Equation 5 of §63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of hydrogen chloride emission rate using Equation 10 of §63.7530 that demonstrates that your source is still meeting the emission limit for hydrogen chloride emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel and are subject to a mercury emission limit, you must submit the calculation of mercury input, using Equation 8 of §63.7530, that demonstrates that your source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 11 of §63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis).

(7) If you wish to burn a new type of fuel in an affected source subject to an emission limit and you cannot demonstrate compliance with the maximum chlorine input operating limit using Equation 7 of §63.7530 or the maximum mercury input operating limit using Equation 8 of §63.7530, you must include in the compliance report a statement indicating the intent to conduct a new performance test within 60 days of starting to burn the new fuel.

(8) A summary of any monthly fuel analyses conducted to demonstrate compliance according to §§63.7521 and 63.7530 for affected sources subject to emission limits, and any fuel specification analyses conducted according to §63.7521(f) and §63.7530(g).

(9) If there are no deviations from any emission limits or operating limits in this subpart that apply to you, a statement that there were no deviations from the emission limits or operating limits during the reporting period.

(10) If there were no deviations from the monitoring requirements including no periods during which the CMSs, including CEMS, COMS, and continuous parameter monitoring systems, were out of control as specified in §63.8(c)(7), a statement that there were no deviations and no periods during which the CMS were out of control during the reporting period.

(11) If a malfunction occurred during the reporting period, the report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by you during a malfunction of a boiler, process heater, or associated air pollution control device or CMS to minimize emissions in accordance with §63.7500(a)(3), including actions taken to correct the malfunction.

(12) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual or biennial tune-up according to §63.7540(a)(10) or (a)(11), respectively. Include the date of the most recent burner inspection if it was not done annually or biennially and was delayed until the next scheduled unit shutdown.

(13) If you plan to demonstrate compliance by emission averaging, certify the emission level achieved or the control technology employed is no less stringent that the level or control technology contained in the notification of compliance status in §63.7545(e)(5)(i).

(d) For each deviation from an emission limit or operating limit in this subpart that occurs at an affected source where you are not using a CMS to comply with that emission limit or operating limit, the compliance report must additionally contain the information required in paragraphs (d)(1) through (4) of this section.

(1) The total operating time of each affected source during the reporting period.

(2) A description of the deviation and which emission limit or operating limit from which you deviated.

(3) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.

(4) A copy of the test report if the annual performance test showed a deviation from the emission limits.

(e) For each deviation from an emission limit, operating limit, and monitoring requirement in this subpart occurring at an affected source where you are using a CMS to comply with that emission limit or operating limit, you must include the information required in paragraphs (e)(1) through (12) of this section. This includes any deviations from your site-specific monitoring plan as required in §63.7505(d).

(1) The date and time that each deviation started and stopped and description of the nature of the deviation (*i.e.,* what you deviated from).

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out of control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped.

(5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(6) An analysis of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS's downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

(8) An identification of each parameter that was monitored at the affected source for which there was a deviation.

(9) A brief description of the source for which there was a deviation.

(10) A brief description of each CMS for which there was a deviation.

(11) The date of the latest CMS certification or audit for the system for which there was a deviation.

(12) A description of any changes in CMSs, processes, or controls since the last reporting period for the source for which there was a deviation.

(f) Each affected source that has obtained a Title V operating permit pursuant to part 70 or part 71 of this chapter must report all deviations as defined in this subpart in the semiannual monitoring report required by §70.6(a)(3)(iii)(A) or §71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 9 to this subpart along with, or as part of, the semiannual monitoring report required by §70.6(a)(3)(iii)(A) or §71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the delegated authority.

(g) [Reserved]

(h) As of January 1, 2012 and within 60 days after the date of completing each performance test, as defined in §63.2, conducted to demonstrate compliance with this subpart, you must submit relative accuracy test audit (*i.e.* , reference method) data and performance test (*i.e.* , compliance test) data, except opacity data, electronically to EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool (ERT) (see *http://www.epa.gov/ttn/chief/ert/ert tool.html/*) or other compatible electronic spreadsheet. Only data collected using test methods compatible with ERT are subject to this requirement to be submitted electronically into EPA's WebFIRE database.

§ 63.7555 What records must I keep?

(a) You must keep records according to paragraphs (a)(1) and (2) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in §63.10(b)(2)(viii).

(b) For each CEMS, COMS, and continuous monitoring system you must keep records according to paragraphs (b)(1) through (5) of this section.

(1) Records described in §63.10(b)(2)(vii) through (xi).

(2) Monitoring data for continuous opacity monitoring system during a performance evaluation as required in §63.6(h)(7)(i) and (ii).

(3) Previous (*i.e.,* superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(4) Request for alternatives to relative accuracy test for CEMS as required in §63.8(f)(6)(i).

(5) Records of the date and time that each deviation started and stopped.

(c) You must keep the records required in Table 8 to this subpart including records of all monitoring data and calculated averages for applicable operating limits, such as opacity, pressure drop, pH, and operating load, to show continuous compliance with each emission limit and operating limit that applies to you.

(d) For each boiler or process heater subject to an emission limit in Table 1, 2 or 12 to this subpart, you must also keep the applicable records in paragraphs (d)(1) through (8) of this section.

(1) You must keep records of monthly fuel use by each boiler or process heater, including the type(s) of fuel and amount(s) used.

(2) If you combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to §41.3(b)(1), you must keep a record which documents how the secondary material meets each of the legitimacy criteria. If you combust a fuel that has been processed from a discarded non-hazardous secondary material pursuant to §241.3(b)(4), you must keep records as to how the operations that produced the fuel satisfies the definition of processing in §241.2. If the fuel received a non-waste determination pursuant to the petition process submitted under §241.3(c), you must keep a record that documents how the fuel satisfies the requirements of the petition process.

(3) You must keep records of monthly hours of operation by each boiler or process heater that meets the definition of limited-use boiler or process heater.

(4) A copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 7 of §63.7530, that were done to demonstrate continuous compliance with the hydrogen chloride emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of hydrogen chloride emission rates, using Equation 10 of §63.7530, that were done to demonstrate compliance with the hydrogen chloride emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum chlorine fuel input or hydrogen chloride emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate chlorine fuel input, or hydrogen chloride emission rate, for each boiler and process heater.

(5) A copy of all calculations and supporting documentation of maximum mercury fuel input, using Equation 8 of §63.7530, that were done to demonstrate continuous compliance with the mercury emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of mercury emission rates, using Equation 11 of §63.7530, that were done to demonstrate compliance with the mercury emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum mercury fuel input or mercury emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate mercury fuel input, or mercury emission rates, for each boiler and process heater.

(6) If, consistent with §63.7515(b) and (c), you choose to stack test less frequently than annually, you must keep annual records that document that your emissions in the previous stack test(s) were less than 75 percent of the applicable emission limit, and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year.

(7) Records of the occurrence and duration of each malfunction of the boiler or process heater, or of the associated air pollution control and monitoring equipment.

(8) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.7500(a)(3), including corrective actions to restore the malfunctioning boiler or process heater, air pollution control, or monitoring equipment to its normal or usual manner of operation.

(e) If you elect to average emissions consistent with §63.7522, you must additionally keep a copy of the emission averaging implementation plan required in §63.7522(g), all calculations required under §63.7522, including monthly records of heat input or steam generation, as applicable, and monitoring records consistent with §63.7541.

(f) If you elect to use emission credits from energy conservation measures to demonstrate compliance according to §63.7533, you must keep a copy of the Implementation Plan required in §63.7533(d) and copies of all data and calculations used to establish credits according to §63.7533(b), (c), and (f).

(g) If you elected to demonstrate that the unit meets the specifications for hydrogen sulfide and mercury for the other gas 1 subcategory and you cannot submit a signed certification under §63.7545(g) because the constituents could exceed the specifications, you must maintain monthly records of the calculations and results of the fuel specifications for mercury and hydrogen sulfide in Table 6.

(h) If you operate a unit designed to burn natural gas, refinery gas, or other gas 1 fuel that is subject to this subpart, and you use an alternative fuel other than natural gas, refinery gas, or other gas 1 fuel, you must keep records of the total hours per calendar year that alternative fuel is burned.

§ 63.7560 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records off site for the remaining 3 years.

Other Requirements and Information

§ 63.7565 What parts of the General Provisions apply to me?

Table 10 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§ 63.7570 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by EPA, or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as EPA) has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities listed in paragraphs (b)(1) through (5) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency, however, EPA retains oversight of this subpart and can take enforcement actions, as appropriate.

(1) Approval of alternatives to the non-opacity emission limits and work practice standards in §63.7500(a) and (b) under §63.6(g).

(2) Approval of alternative opacity emission limits in §63.7500(a) under §63.6(h)(9).

(3) Approval of major change to test methods in Table 5 to this subpart under §63.7(e)(2)(ii) and (f) and as defined in §63.90, and alternative analytical methods requested under §63.7521(b)(2).

(4) Approval of major change to monitoring under §63.8(f) and as defined in §63.90, and approval of alternative operating parameters under §63.7500(a)(2) and §63.7522(g)(2).

(5) Approval of major change to recordkeeping and reporting under §63.10(e) and as defined in §63.90.

§ 63.7575 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in §63.2 (the General Provisions), and in this section as follows:

Affirmative defense means, in the context of an enforcement proceeding, a response or defense put forward by a defendant, regarding which the defendant has the burden of proof, and the merits of which are independently and objectively evaluated in a judicial or administrative proceeding.

Annual heat input means the heat input for the 12 months preceding the compliance demonstration.

Bag leak detection system means a group of instruments that are capable of monitoring particulate matter loadings in the exhaust of a fabric filter (*i.e.,* baghouse) in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on electrodynamic, triboelectric, light scattering, light transmittance, or other principle to monitor relative particulate matter loadings.

Benchmarking means a process of comparison against standard or average.

Biomass or bio-based solid fuel means any biomass-based solid fuel that is not a solid waste. This includes, but is not limited to, wood residue; wood products (*e.g.,* trees, tree stumps, tree limbs, bark, lumber, sawdust, sander dust, chips, scraps, slabs, millings, and shavings); animal manure, including litter and other bedding materials; vegetative agricultural and silvicultural materials, such as logging residues (slash), nut and grain hulls and chaff (*e.g.,* almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds. This definition of biomass is not intended to suggest that these materials are or are not solid waste.

Blast furnace gas fuel-fired boiler or process heater means an industrial/commercial/institutional boiler or process heater that receives 90 percent or more of its total annual gas volume from blast furnace gas.

Boiler means an enclosed device using controlled flame combustion and having the primary purpose of recovering thermal energy in the form of steam or hot water. Controlled flame combustion refers to a steady-state, or near steady-state, process wherein fuel and/or oxidizer feed rates are controlled. A device combusting solid waste, as defined in §241.3, is not a boiler unless the device is exempt from the definition of a solid waste incineration unit as provided in section 129(g)(1) of the Clean Air Act. Waste heat boilers are excluded from this definition.

Boiler system means the boiler and associated components, such as, the feed water system, the combustion air system, the fuel system (including burners), blowdown system, combustion control system, and energy consuming systems.

Calendar year means the period between January 1 and December 31, inclusive, for a given year.

Coal means all solid fuels classifiable as anthracite, bituminous, sub-bituminous, or lignite by ASTM D388 (incorporated by reference, see §63.14), coal refuse, and petroleum coke. For the purposes of this subpart, this definition of “coal” includes synthetic fuels derived from coal for creating useful heat, including but not limited to, solvent-refined coal, coal-oil mixtures, and coal-water mixtures. Coal derived gases are excluded from this definition.

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 (6,000 Btu per pound) on a dry basis.

Commercial/institutional boiler means a boiler used in commercial establishments or institutional establishments such as medical centers, research centers, institutions of higher education, hotels, and laundries to provide steam and/or hot water.

Common stack means the exhaust of emissions from two or more affected units through a single flue. Affected units with a common stack may each have separate air pollution control systems located before the common stack, or may have a single air pollution control system located after the exhausts come together in a single flue.

Cost-effective energy conservation measure means a measure that is implemented to improve the energy efficiency of the boiler or facility that has a payback (return of investment) period of 2 years or less.

Deviation.

(1) *Deviation* means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(i) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard; or

(ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit.

(2) A deviation is not always a violation. The determination of whether a deviation constitutes a violation of the standard is up to the discretion of the entity responsible for enforcement of the standards.

Dioxins/furans means tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans.

Distillate oil means fuel oils, including recycled oils, that comply with the specifications for fuel oil numbers 1 and 2, as defined by ASTM D396 (incorporated by reference, see §63.14).

Dry scrubber means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gas in the exhaust stream forming a dry powder material. Sorbent injection systems in fluidized bed boilers and process heaters are included in this definition. A dry scrubber is a dry control system.

Dutch oven means a unit having a refractory-walled cell connected to a conventional boiler setting. Fuel materials are introduced through an opening in the roof of the Dutch oven and burn in a pile on its floor.

Electric utility steam generating unit means a fossil fuel-fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A fossil fuel-fired unit that cogenerates steam and electricity and supplies more than one-third of its potential electric output capacity and more than 25 megawatts electrical output to any utility power distribution system for sale is considered an electric utility steam generating unit.

Electrostatic precipitator (ESP) means an add-on air pollution control device used to capture particulate matter by charging the particles using an electrostatic field, collecting the particles using a grounded collecting surface, and transporting the particles into a hopper. An electrostatic precipitator is usually a dry control system.

Emission credit means emission reductions above those required by this subpart. Emission credits generated may be used to comply with the emissions limits. Credits may come from pollution prevention projects that result in reduced fuel use by affected units. Shutdowns cannot be used to generate credits.

Energy assessment means the following only as this term is used in Table 3 to this subpart.

(1) Energy assessment for facilities with affected boilers and process heaters using less than 0.3 trillion Btu per year heat input will be one day in length maximum. The boiler system and energy use system accounting for at least 50 percent of the energy output will be evaluated to identify energy savings opportunities, within the limit of performing a one-day energy assessment.

(2) The Energy assessment for facilities with affected boilers and process heaters using 0.3 to 1.0 trillion Btu per year will be 3 days in length maximum. The boiler system and any energy use system accounting for at least 33 percent of the energy output will be evaluated to identify energy savings opportunities, within the limit of performing a 3-day energy assessment.

(3) In the Energy assessment for facilities with affected boilers and process heaters using greater than 1.0 trillion Btu per year, the boiler system and any energy use system accounting for at least 20 percent of the energy output will be evaluated to identify energy savings opportunities.

Energy management practices means the set of practices and procedures designed to manage energy use that are demonstrated by the facility's energy policies, a facility energy manager and other staffing responsibilities, energy performance measurement and tracking methods, an energy saving goal, action plans, operating procedures, internal reporting requirements, and periodic review intervals used at the facility.

Energy use system includes, but is not limited to, process heating; compressed air systems; machine drive (motors, pumps, fans); process cooling; facility heating, ventilation, and air-conditioning systems; hot heater systems; building envelop; and lighting.

Equivalent means the following only as this term is used in Table 6 to this subpart:

(1) An equivalent sample collection procedure means a published voluntary consensus standard or practice (VCS) or EPA method that includes collection of a minimum of three composite fuel samples, with each composite consisting of a minimum of three increments collected at approximately equal intervals over the test period.

(2) An equivalent sample compositing procedure means a published VCS or EPA method to systematically mix and obtain a representative subsample (part) of the composite sample.

(3) An equivalent sample preparation procedure means a published VCS or EPA method that: Clearly states that the standard, practice or method is appropriate for the pollutant and the fuel matrix; or is cited as an appropriate sample preparation standard, practice or method for the pollutant in the chosen VCS or EPA determinative or analytical method.

(4) An equivalent procedure for determining heat content means a published VCS or EPA method to obtain gross calorific (or higher heating) value.

(5) An equivalent procedure for determining fuel moisture content means a published VCS or EPA method to obtain moisture content. If the sample analysis plan calls for determining metals (especially the mercury, selenium, or arsenic) using an aliquot of the dried sample, then the drying temperature must be modified to prevent vaporizing these metals. On the other hand, if metals analysis is done on an “as received” basis, a separate aliquot can be dried to determine moisture content and the metals concentration mathematically adjusted to a dry basis.

(6) An equivalent pollutant (mercury, hydrogen chloride, hydrogen sulfide) determinative or analytical procedure means a published VCS or EPA method that clearly states that the standard, practice, or method is appropriate for the pollutant and the fuel matrix and has a published detection limit equal or lower than the methods listed in Table 6 to this subpart for the same purpose.

Fabric filter means an add-on air pollution control device used to capture particulate matter by filtering gas streams through filter media, also known as a baghouse. A fabric filter is a dry control system.

Federally enforceable means all limitations and conditions that are enforceable by the EPA 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 boiler means a boiler utilizing a fluidized bed combustion process.

Fluidized bed combustion means a process where a fuel is burned in a bed of granulated particles, which are maintained in a mobile suspension by the forward flow of air and combustion products.

Fuel cell means a boiler type in which the fuel is dropped onto suspended fixed grates and is fired in a pile. The refractory-lined fuel cell uses combustion air preheating and positioning of secondary and tertiary air injection ports to improve boiler efficiency.

Fuel type means each category of fuels that share a common name or classification. Examples include, but are not limited to, bituminous coal, sub-bituminous coal, lignite, anthracite, biomass, residual oil. Individual fuel types received from different suppliers are not considered new fuel types.

Gaseous fuel includes, but is not limited to, natural gas, process gas, landfill gas, coal derived gas, refinery gas, and biogas. Blast furnace gas is exempted from this definition.

Heat input means heat derived from combustion of fuel in a boiler or process heater and does not include the heat input from preheated combustion air, recirculated flue gases, or exhaust gases from other sources such as gas turbines, internal combustion engines, kilns, etc.

Hourly average means the arithmetic average of at least four CMS data values representing the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CMS calibration, quality assurance, or maintenance activities are being performed.

Hot water heater means a closed vessel with a capacity of no more than 120 U.S. gallons in which water is heated by combustion of gaseous or liquid fuel and is withdrawn for use external to the vessel at pressures not exceeding 160 psig, including the apparatus by which the heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 210 degrees Fahrenheit (99 degrees Celsius). *Hot water heater* also means a tankless unit that provides on demand hot water.

Hybrid suspension grate boiler means a boiler designed with air distributors to spread the fuel material over the entire width and depth of the boiler combustion zone. The drying and much of the combustion of the fuel takes place in suspension, and the combustion is completed on the grate or floor of the boiler.

Industrial boiler means a boiler used in manufacturing, processing, mining, and refining or any other industry to provide steam and/or hot water.

Limited-use boiler or process heater means any boiler or process heater that burns any amount of solid, liquid, or gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and has a federally enforceable limit of no more than 876 hours per year of operation.

Liquid fuel subcategory includes any boiler or process heater of any design that burns more than 10 percent liquid fuel and less than 10 percent solid fuel, based on the total annual heat input to the unit.

Liquid fuel includes, but is not limited to, distillate oil, residual oil, on-spec used oil, and biodiesel.

Load fraction means the actual heat input of the boiler or process heater divided by the average operating load determined according to Table 7 to this subpart.

Metal process furnaces include natural gas-fired annealing furnaces, preheat furnaces, reheat furnaces, aging furnaces, heat treat furnaces, and homogenizing furnaces.

Million Btu (MMBtu) means one million British thermal units.

Minimum activated carbon injection rate means load fraction (percent) multiplied by the lowest hourly average activated carbon injection rate measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limits.

Minimum pressure drop means the lowest hourly average pressure drop measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

Minimum scrubber effluent pH means the lowest hourly average sorbent liquid pH measured at the inlet to the wet scrubber according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable hydrogen chloride emission limit.

Minimum scrubber liquid flow rate means the lowest hourly average liquid flow rate (*e.g.,* to the PM scrubber or to the acid gas scrubber) measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

Minimum scrubber pressure drop means the lowest hourly average scrubber pressure drop measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

Minimum sorbent injection rate means load fraction (percent) multiplied by the lowest hourly average sorbent injection rate for each sorbent measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limits.

Minimum total secondary electric power means the lowest hourly average total secondary electric power determined from the values of secondary voltage and secondary current to the electrostatic precipitator measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limits.

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) Liquid petroleum gas, as defined in ASTM D1835 (incorporated by reference, *see* §63.14); or

(3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 mega joules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot); or

(4) Propane or propane derived synthetic natural gas. Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C_3H_8.

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Operating day means a 24-hour period between 12 midnight and the following midnight during which any fuel is combusted at any time in the boiler or process heater unit. It is not necessary for fuel to be combusted for the entire 24-hour period.

Other gas 1 fuel means a gaseous fuel that is not natural gas or refinery gas and does not exceed the maximum concentration of 40 micrograms/cubic meters of mercury and 4 parts per million, by volume, of hydrogen sulfide.

Particulate matter (PM) means any finely divided solid or liquid material, other than uncombined water, as measured by the test methods specified under this subpart, or an approved alternative method.

Period of natural gas curtailment or supply interruption means a period of time during which the supply of natural gas to an affected facility is halted for reasons beyond the control of the facility. The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of a facility for the purposes of this definition. An increase in the cost or unit price of natural gas does not constitute a period of natural gas curtailment or supply interruption.

Process heater means an enclosed device using controlled flame, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not come into direct contact with process materials. A device combusting solid waste, as defined in §241.3, is not a process heater unless the device is exempt from the definition of a solid waste incineration unit as provided in section 129(g)(1) of the Clean Air Act. Process heaters do not include units used for comfort heat or space heat, food preparation for on-site consumption, or autoclaves.

Pulverized coal boiler means a boiler in which pulverized coal or other solid fossil fuel is introduced into an air stream that carries the coal to the combustion chamber of the boiler where it is fired in suspension.

Qualified energy assessor means:

(1) someone who has demonstrated capabilities to evaluate a set of the typical energy savings opportunities available in opportunity areas for steam generation and major energy using systems, including, but not limited to:

(i) Boiler combustion management.

(ii) Boiler thermal energy recovery, including

(A) Conventional feed water economizer,

(B) Conventional combustion air preheater, and

(C) Condensing economizer.

(iii) Boiler blowdown thermal energy recovery.

(iv) Primary energy resource selection, including

(A) Fuel (primary energy source) switching, and

(B) Applied steam energy versus direct-fired energy versus electricity.

(v) Insulation issues.

(vi) Steam trap and steam leak management.

(vi) Condensate recovery.

(viii) Steam end-use management.

(2) Capabilities and knowledge includes, but is not limited to:

(i) Background, experience, and recognized abilities to perform the assessment activities, data analysis, and report preparation.

(ii) Familiarity with operating and maintenance practices for steam or process heating systems.

(iii) Additional potential steam system improvement opportunities including improving steam turbine operations and reducing steam demand.

(iv) Additional process heating system opportunities including effective utilization of waste heat and use of proper process heating methods.

(v) Boiler-steam turbine cogeneration systems.

(vi) Industry specific steam end-use systems.

Refinery gas means any gas that is generated at a petroleum refinery and is combusted. Refinery gas includes natural gas when the natural gas is combined and combusted in any proportion with a gas generated at a refinery. Refinery gas includes gases generated from other facilities when that gas is combined and combusted in any proportion with gas generated at a refinery.

Residual oil means crude oil, and all fuel oil numbers 4, 5 and 6, as defined in ASTM D396–10 (incorporated by reference, see §63.14(b)).

Responsible official means responsible official as defined in §70.2.

Solid fossil fuel includes, and is not limited to, coal, coke, petroleum coke, and tire derived fuel.

Solid fuel means any solid fossil fuel or biomass or bio-based solid fuel.

Steam output means (1) for a boiler that produces steam for process or heating only (no power generation), the energy content in terms of MMBtu of the boiler steam output, and (2) for a boiler that cogenerates process steam and electricity (also known as combined heat and power (CHP)), the total energy output, which is the sum of the energy content of the steam exiting the turbine and sent to process in MMBtu and the energy of the electricity generated converted to MMBtu at a rate of 10,000 Btu per kilowatt-hour generated (10 MMBtu per megawatt-hour).

Stoker means a unit consisting of a mechanically operated fuel feeding mechanism, a stationary or moving grate to support the burning of fuel and admit under-grate air to the fuel, an overfire air system to complete combustion, and an ash discharge system. This definition of stoker includes air swept stokers. There are two general types of stokers: Underfeed and overfeed. Overfeed stokers include mass feed and spreader stokers.

Suspension boiler means a unit designed to feed the fuel by means of fuel distributors. The distributors inject air at the point where the fuel is introduced into the boiler in order to spread the fuel material over the boiler width. The drying (and much of the combustion) occurs while the material is suspended in air. The combustion of the fuel material is completed on a grate or floor below. Suspension boilers almost universally are designed to have high heat release rates to dry quickly the wet fuel as it is blown into the boilers.

Temporary boiler means any gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved from one location to another by means of, for example, wheels, skids, carrying handles, dollies, trailers, or platforms. A boiler is not a temporary boiler if any one of the following conditions exists:

(1) The equipment is attached to a foundation.

(2) The boiler or a replacement remains at a location for more than 12 consecutive months. Any temporary boiler that replaces a temporary boiler at a location and performs the same or similar function will be included in calculating the consecutive time period.

(3) The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least 2 years, and operates at that facility for at least 3 months each year.

(4) The equipment is moved from one location to another in an attempt to circumvent the residence time requirements of this definition.

Tune-up means adjustments made to a boiler in accordance with procedures supplied by the manufacturer (or an approved specialist) to optimize the combustion efficiency.

Unit designed to burn biomass/bio-based solid subcategory includes any boiler or process heater that burns at least 10 percent biomass or bio-based solids on an annual heat input basis in combination with solid fossil fuels, liquid fuels, or gaseous fuels.

Unit designed to burn coal/solid fossil fuel subcategory includes any boiler or process heater that burns any coal or other solid fossil fuel alone or at least 10 percent coal or other solid fossil fuel on an annual heat input basis in combination with liquid fuels, gaseous fuels, or less than 10 percent biomass and bio-based solids on an annual heat input basis.

Unit designed to burn gas 1 subcategory includes any boiler or process heater that burns only natural gas, refinery gas, and/or other gas 1 fuels; with the exception of liquid fuels burned for periodic testing not to exceed a combined total of 48 hours during any calendar year, or during periods of gas curtailment and gas supply emergencies.

Unit designed to burn gas 2 (other) subcategory includes any boiler or process heater that is not in the unit designed to burn gas 1 subcategory and burns any gaseous fuels either alone or in combination with less than 10 percent coal/solid fossil fuel, less than 10 percent biomass/bio-based solid fuel, and less than 10 percent liquid fuels on an annual heat input basis.

Unit designed to burn liquid subcategory includes any boiler or process heater that burns any liquid fuel, but less than 10 percent coal/solid fossil fuel and less than 10 percent biomass/bio-based solid fuel on an annual heat input basis, either alone or in combination with gaseous fuels. Gaseous fuel boilers and process heaters that burn liquid fuel for periodic testing of liquid fuel, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year or during periods of maintenance, operator training, or testing of liquid fuel, not to exceed a combined total of 48 hours during any calendar year are not included in this definition. Gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply emergencies of any duration are also not included in this definition.

Unit designed to burn liquid fuel that is a non-continental unit means an industrial, commercial, or institutional boiler or process heater designed to burn liquid fuel located in the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Unit designed to burn solid fuel subcategory means any boiler or process heater that burns any solid fuel alone or at least 10 percent solid fuel on an annual heat input basis in combination with liquid fuels or gaseous fuels.

Voluntary Consensus Standards or VCS mean technical standards (*e.g.,* materials specifications, test methods, sampling procedures, business practices) developed or adopted by one or more voluntary consensus bodies. EPA/Office of Air Quality Planning and Standards, by precedent, has only used VCS that are written in English. Examples of VCS bodies are: American Society of Testing and Materials (ASTM 100 Barr Harbor Drive, P.O. Box CB700, West Conshohocken, Pennsylvania 19428–B2959, (800) 262–1373, *http://www.astm.org*), American Society of Mechanical Engineers (ASME ASME, Three Park Avenue, New York, NY 10016–5990, (800) 843–2763, *http://www.asme.org*), International Standards Organization (ISO 1, ch. de la Voie-Creuse, Case postale 56, CH–1211 Geneva 20, Switzerland, +41 22 749 01 11, *http://www.iso.org/iso/home.htm*), Standards Australia (AS Level 10, The Exchange Centre, 20 Bridge Street, Sydney, GPO Box 476, Sydney NSW 2001, + 61 2 9237 6171 *http://www.stadards.org.au*), British Standards Institution (BSI, 389 Chiswick High Road, London, W4 4AL, United Kingdom, +44 (0)20 8996 9001, *http://www.bsigroup.com*), Canadian Standards Association (CSA 5060 Spectrum Way, Suite 100, Mississauga, Ontario L4W 5N6, Canada, 800–463–6727, *http://www.csa.ca*), European Committee for Standardization (CEN CENELEC Management Centre Avenue Marnix 17 B–1000 Brussels, Belgium +32 2 550 08 11, *http://www.cen.eu/cen*), and German Engineering Standards (VDI VDI Guidelines Department, P.O. Box 10 11 39 40002, Duesseldorf, Germany, +49 211 6214–230, *http://www.vdi.eu*). The types of standards that are not considered VCS are standards developed by: The United States, *e.g.,* California (CARB) and Texas (TCEQ); industry groups, such as American Petroleum Institute (API), Gas Processors Association (GPA), and Gas Research Institute (GRI); and other branches of the U.S. government, *e.g.,* Department of Defense (DOD) and Department of Transportation (DOT). This does not preclude EPA from using standards developed by groups that are not VCS bodies within their rule. When this occurs, EPA has done searches and reviews for VCS equivalent to these non-EPA methods.

Waste heat boiler means a device that recovers normally unused energy and converts it to usable heat. Waste heat boilers are also referred to as heat recovery steam generators.

Waste heat process heater means an enclosed device that recovers normally unused energy and converts it to usable heat. Waste heat process heaters are also referred to as recuperative process heaters.

Wet scrubber means any add-on air pollution control device that mixes an aqueous stream or slurry with the exhaust gases from a boiler or process heater to control emissions of particulate matter or to absorb and neutralize acid gases, such as hydrogen chloride. A wet scrubber creates an aqueous stream or slurry as a byproduct of the emissions control process.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the Clean Air Act.

Tables to Subpart DDDDD of Part 63

As stated in §63.7500, you must comply with the following applicable emission limits:

Table 1 to Subpart DDDDD of Part 63_Emission Limits for New or Reconstructed Boilers and Process Heaters a
[Units with heat input capacity of 10 million Btu per hour or greater]

If your boiler or process heater is in this subcategory . . .	For the following pollutants . . .	The emissions must not exceed the following emission limits, except during periods of startup and shutdown . . .	Or the emissions must not exceed the following limits (lb per MMBtu of steam output) . . .	Using this specified sampling volume or test run duration . . .
1. Units in all subcategories designed to burn solid fuel.	a. Particulate Matter.	0.0011 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	0.0011; (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	Collect a minimum of 3 dscm per run.
	b. Hydrogen Chloride.	0.0022 lb per MMBtu of heat input.	0.0021.....	For M26A, collect a minimum of 1 dscm per run; for M26 collect a minimum of 60 liters per run.
	c. Mercury.....	3.5E-06 lb per MMBtu of heat input.	3.4E-06.....	For M29, collect a minimum of 1 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784 \b\ collect a minimum of 2 dscm.
2. Units designed to burn pulverized coal/solid fossil fuel.	a. Carbon monoxide (CO).	12 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.01.....	1 hr minimum sampling time, use a span value of 30 ppmv.
	b. Dioxins/Furans.	0.003 ng/dscm (TEQ) corrected to 7 percent oxygen.	2.8E-12 (TEQ).....	Collect a minimum of 4 dscm per run.
3. Stokers designed to burn coal/ solid fossil fuel.	a. CO.....	6 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.005.....	1 hr minimum sampling time, use a span value of 20 ppmv.
	b. Dioxins/Furans.	0.003 ng/dscm (TEQ) corrected to 7 percent oxygen.	2.8E-12 (TEQ).....	Collect a minimum of 4 dscm per run.
4. Fluidized bed units designed to burn coal/solid fossil fuel.	a. CO.....	18 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.02.....	1 hr minimum sampling time, use a span value of 40 ppmv.
	b. Dioxins/Furans.	0.002 ng/dscm (TEQ) corrected to 7 percent	1.8E-12 (TEQ).....	Collect a minimum of 4 dscm per run.

		oxygen.		
5. Stokers designed to burn biomass/bio-based solids.	a. CO.....	160 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.13.....	1 hr minimum sampling time, use a span value of 400 ppmv.
	b. Dioxins/Furans.	0.005 ng/dscm (TEQ) corrected to 7 percent oxygen.	4.4E-12 (TEQ).....	Collect a minimum of 4 dscm per run.
6. Fluidized bed units designed to burn biomass/bio-based solids.	a. CO.....	260 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.18.....	1 hr minimum sampling time, use a span value of 500 ppmv.
	b. Dioxins/Furans.	0.02 ng/dscm (TEQ) corrected to 7 percent oxygen.	1.8E-11 (TEQ).....	Collect a minimum of 4 dscm per run.
7. Suspension burners/Dutch Ovens designed to burn biomass/ bio-based solids.	a. CO.....	470 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.45.....	1 hr minimum sampling time, use a span value of 1000 ppmv.
	b. Dioxins/Furans.	0.2 ng/dscm (TEQ) corrected to 7 percent oxygen.	1.8E-10 (TEQ).....	Collect a minimum of 4 dscm per run.
8. Fuel cells designed to burn biomass/bio-based solids.	a. CO.....	470 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.23.....	1 hr minimum sampling time, use a span value of 1000 ppmv.
	b. Dioxins/Furans.	0.003 ng/dscm (TEQ) corrected to 7 percent oxygen.	2.86E-12 (TEQ)....	Collect a minimum of 4 dscm per run.
9. Hybrid suspension/grate units designed to burn biomass/bio-based solids.	a. CO.....	1,500 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.84.....	1 hr minimum sampling time, use a span value of 3000 ppmv.
	b. Dioxins/Furans.	0.2 ng/dscm (TEQ) corrected to 7 percent oxygen.	1.8E-10 (TEQ).....	Collect a minimum of 4 dscm per run.
10. Units designed to burn liquid fuel.	a. Particulate Matter.	0.0013 lb per MMBtu of heat input (30-day rolling average for residual oil-fired units 250 MMBtu/hr or greater, 3-run average for other units).	0.001; (30-day rolling average for residual oil-fired units 250 MMBtu/hr or greater, 3-run average for other units).	Collect a minimum of 3 dscm per run.
	b. Hydrogen Chloride.	0.00033 lb per MMBtu of heat input.	0.0003.....	For M26A: Collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.
	c. Mercury.....	2.1E-07 lb per MMBtu of heat input.	0.2E-06.....	Collect enough volume to meet an in-stack detection limit data quality objective of 0.10 ug/dscm.
	d. CO.....	3 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.0026.....	1 hr minimum sampling time, use a span value of 3 ppmv.
	e. Dioxins/Furans.	0.002 ng/dscm (TEQ) corrected to 7 percent oxygen.	4.6E-12 (TEQ).....	Collect a minimum of 4 dscm per run.

11. Units designed to burn liquid fuel located in non-continental States and territories.	a. Particulate Matter.	0.0013 lb per MMBtu of heat input (30-day rolling average for residual oil-fired units 250 MMBtu/hr or greater, 3-run average for other units).	0.001; (30-day rolling average for residual oil-fired units 250 MMBtu/hr or greater, 3-run average for other units).	Collect a minimum of 3 dscm per run.
	b. Hydrogen Chloride.	0.00033 lb per MMBtu of heat input.	0.0003.....	For M26A: Collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.
	c. Mercury.....	7.8E-07 lb per MMBtu of heat input.	8.0E-07.....	For M29, collect a minimum of 3 dscm per run; for M30B, collect a minimum sample as specified in the method; for ASTM D6784 \b\ collect a minimum of 3 dscm.
	d. CO.....	51 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.043.....	1 hr minimum sampling time, use a span value of 100 ppmv.
	e. Dioxins/Furans.	0.002 ng/dscm (TEQ) corrected to 7 percent oxygen.	4.6E-12(TEQ).....	Collect a minimum of 3 dscm per run.
12. Units designed to burn gas 2 (other) gases.	a. Particulate Matter.	0.0067 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	.004; (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	Collect a minimum of 1 dscm per run.
	b. Hydrogen Chloride.	0.0017 lb per MMBtu of heat input.	.003.....	For M26A, Collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.
	c. Mercury.....	7.9E-06 lb per MMBtu of heat input.	2.0E-07.....	For M29, collect a minimum of 1 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784 \b\ collect a minimum of 2 dscm.
	d. CO.....	3 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.002.....	1 hr minimum sampling time, use a span value of 10 ppmv.
	e. Dioxins/Furans.	0.08 ng/dscm (TEQ) corrected to 7 percent oxygen.	4.1E-12 (TEQ).....	Collect a minimum of 4 dscm per run

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\a\ If your affected source is a new or reconstructed affected source that commenced construction or

reconstruction after June 4, 2010, and before May 20, 2011, you may comply with the emission limits in Table 12 to this subpart until March 21, 2014. On and after March 21, 2014, you must comply with the emission limits in Table 1 to this subpart.

\b\ Incorporated by reference, see § 63.14.

As stated in §63.7500, you must comply with the following applicable emission limits:

Table 2 to Subpart DDDDD of Part 63_Emission Limits for Existing Boilers and Process Heaters
[Units with heat input capacity of 10 million Btu per hour or greater]

If your boiler or process heater is in this subcategory . . .	For the following pollutants . . .	The emissions must not exceed the following emission limits, except during periods of startup and shutdown . . .	The emissions must not exceed the following output-based limits (lb per MMBtu of steam output) . . .	Using this sampling volume or test run duration . . .
1. Units in all subcategories designed to burn solid fuel.	a. Particulate Matter.	0.039 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	0.038; (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	Collect a minimum of 1 dscm per run.
	b. Hydrogen Chloride.	0.035 lb per MMBtu of heat input.	0.04.....	For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.
	c. Mercury.....	4.6E-06 lb per MMBtu of heat input.	4.5E-06.....	For M29, collect a minimum of 1 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784 \a\ collect a minimum of 2 dscm.
2. Pulverized coal units designed to burn pulverized coal/solid fossil fuel.	a. CO.....	160 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.14.....	1 hr minimum sampling time, use a span value of 300 ppmv.
	b. Dioxins/Furans. (TEQ) corrected to 7 percent oxygen.	0.004 ng/dscm	3.7E-12 (TEQ).....	Collect a minimum of 4 dscm per run.
3. Stokers designed to burn coal/ solid fossil fuel.	a. CO.....	270 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.25.....	1 hr minimum sampling time, use a span value of 500 ppmv.
	b. Dioxins/Furans. (TEQ) corrected to 7 percent oxygen.	0.003 ng/dscm	2.8E-12 (TEQ).....	Collect a minimum of 4 dscm per run.
4. Fluidized bed units designed to burn coal/solid fossil fuel.	a. CO.....	82 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.08.....	1 hr minimum sampling time, use a span value of 200 ppmv
	b. Dioxins/Furans. (TEQ) corrected to 7 percent	0.002 ng/dscm	1.8E-12 (TEQ).....	Collect a minimum of 4 dscm per run.

	oxygen.		
5. Stokers designed to burn biomass/bio-based solid.	a. CO..... 490 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.35..... 1 hr minimum sampling time, use a span value of 1000 ppmv.	
	b. Dioxins/Furans. 0.005 ng/dscm (TEQ) corrected to 7 percent oxygen.	4.4E-12 (TEQ)..... Collect a minimum of 4 dscm per run.	
6. Fluidized bed units designed to burn biomass/bio-based solid.	a. CO..... 430 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.28..... 1 hr minimum sampling time, use a span value of 850 ppmv.	
	b. Dioxins/Furans. 0.02 ng/dscm (TEQ) corrected to 7 percent oxygen.	1.8E-11(TEQ)..... Collect a minimum of 4 dscm per run.	
7. Suspension burners/Dutch Ovens designed to burn biomass/ bio-based solid.	a. CO..... 470 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.45..... 1 hr minimum sampling time, use a span value of 1000 ppmv.	
	b. Dioxins/Furans. 0.2 ng/dscm (TEQ) corrected to 7 percent oxygen.	1.8E-10 (TEQ)..... Collect a minimum of 4 dscm per run.	
8. Fuel cells designed to burn biomass/bio-based solid.	a. CO..... 690 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.34..... 1 hr minimum sampling time, use a span value of 1300 ppmv.	
	b. Dioxins/Furans. 4 ng/dscm (TEQ) corrected to 7 percent oxygen.	3.5E-09 (TEQ)..... Collect a minimum of 4 dscm per run.	
9. Hybrid suspension/grate units designed to burn biomass/bio-based solid.	a. CO..... 3,500 ppm by volume on a dry basis corrected to 3 percent oxygen.	2.0..... 1 hr minimum sampling time, use a span value of 7000 ppmv.	
	b. Dioxins/Furans. 0.2 ng/dscm (TEQ) corrected to 7 percent oxygen.	1.8E-10 (TEQ)..... Collect a minimum of 4 dscm per run.	
10. Units designed to burn liquid fuel.	a. Particulate Matter. 0.0075 lb per MMBtu of heat input (30-day rolling average for residual oil-fired units 250 MMBtu/hr or greater, 3-run average for other units).	0.0073; (30-day rolling average for residual oil-fired units 250 MMBtu/hr or greater, 3-run average for other units).	Collect a minimum of 1 dscm per run.
	b. Hydrogen Chloride. 0.00033 lb per MMBtu of heat input.	0.0003..... For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 200 liters per run.	
	c. Mercury..... 3.5E-06 lb per MMBtu of heat input.	3.3E-06..... For M29, collect a minimum of 1 dscm per run; for M30A or M30B collect a minimum sample as specified in the method, for ASTM D6784 \a\ collect a minimum of 2 dscm.	
	d. CO..... 10 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.0083..... 1 hr minimum sampling time, use a span value of 20 ppmv.	
	e. Dioxins/Furans. 4 ng/dscm (TEQ) corrected to 7	9.2E-09 (TEQ)..... Collect a minimum of 1 dscm per	

			percent oxygen.	run.
11. Units designed to burn liquid fuel located in non-continental States and territories.	a. Particulate Matter.	0.0075 lb per MMBtu of heat input (30-day rolling average for residual oil-fired units 250 MMBtu/hr or greater, 3-run average for other units).	0.0073; (30-day rolling average for residual oil-fired units 250 MMBtu/hr or greater, 3-run average for other units).	Collect a minimum of 1 dscm per run.
	b. Hydrogen Chloride.	0.00033 lb per MMBtu of heat input.	0.0003.....	For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 200 liters per run.
	c. Mercury.....	7.8E-07 lb per MMBtu of heat input.	8.0E-07.....	For M29, collect a minimum of 1 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784 \a\ collect a minimum of 2 dscm.
	d. CO.....	160 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.13.....	1 hr minimum sampling time, use a span value of 300 ppmv.
	e. Dioxins/Furans.	4 ng/dscm (TEQ) corrected to 7 percent oxygen.	9.2E-09 (TEQ).....	Collect a minimum of 1 dscm per run.
12. Units designed to burn gas 2 (other) gases.	a. Particulate Matter.	0.043 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	0.026; (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	Collect a minimum of 1 dscm per run.
	b. Hydrogen Chloride.	0.0017 lb per MMBtu of heat input.	0.001.....	For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.
	c. Mercury.....	1.3E-05 lb per MMBtu of heat input.	7.8E-06.....	For M29, collect a minimum of 1 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784 \a\ collect a minimum of 2 dscm.
	d. CO.....	9 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.005.....	1 hr minimum sampling time, use a span value of 20 ppmv.
	e. Dioxins/Furans.	0.08 ng/dscm (TEQ) corrected to 7 percent oxygen.	3.9E-11 (TEQ).....	Collect a minimum of 4 dscm per run.

\a\ Incorporated by reference, see § 63.14.

As stated in §63.7500, you must comply with the following applicable work practice standards:

Table 3 to Subpart DDDDD of Part 63_Work Practice Standards

If your unit is . . .	You must meet the following . . .
1. A new or existing boiler or process heater with heat input capacity of less than 10 million Btu per hour or a limited use boiler or process heater.	Conduct a tune-up of the boiler or process heater biennially as specified in § 63.7540.
2. A new or existing boiler or process heater in either the Gas 1 or Metal Process Furnace subcategory with heat input capacity of 10 million Btu per hour or greater.	Conduct a tune-up of the boiler or process heater annually as specified in § 63.7540.
3. An existing boiler or process heater located at a major source facility.	Must have a one-time energy assessment performed on the major source facility by qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table, satisfies the energy assessment requirement. The energy assessment must include: a. A visual inspection of the boiler or process heater system. b. An evaluation of operating characteristics of the facility, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints, c. An inventory of major energy consuming systems, d. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage, e. A review of the facility's energy management practices and provide recommendations for improvements consistent with the definition of energy management practices, f. A list of major energy conservation measures, g. A list of the energy savings potential of the energy conservation measures identified, and h. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.
4. An existing or new unit subject to emission limits in Tables 1, 2, or 12 of this subpart..	Minimize the unit's startup and shutdown periods following the manufacturer's recommended procedures. If manufacturer's

recommended procedures are not available, you must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available.

As stated in §63.7500, you must comply with the applicable operating limits:

Table 4 to Subpart DDDDD of Part 63_Operating Limits for Boilers and Process Heaters

If you demonstrate compliance using . . .	You must meet these operating limits . . .
1. Wet PM scrubber control.....	Maintain the 12-hour block average pressure drop and the 12-hour block average liquid flow rate at or above the lowest 1-hour average pressure drop and the lowest 1-hour average liquid flow rate, respectively, measured during the most recent performance test demonstrating compliance with the PM emission limitation according to § 63.7530(b) and Table 7 to this subpart.
2. Wet acid gas (HCl) scrubber control.	Maintain the 12-hour block average effluent pH at or above the lowest 1-hour average pH and the 12-hour block average liquid flow rate at or above the lowest 1-hour average liquid flow rate measured during the most recent performance test demonstrating compliance with the HCl emission limitation according to § 63.7530(b) and Table 7 to this subpart.
3. Fabric filter control on units not required to install and operate a PM CEMS.	a. Maintain opacity to less than or equal to 10 percent opacity (daily block average); or b. Install and operate a bag leak detection system according to § 63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period.
4. Electrostatic precipitator control on units not required to install and operate a PM CEMS.	a. This option is for boilers and process heaters that operate dry control systems (i.e., an ESP without a wet scrubber). Existing and new boilers and process heaters must maintain opacity to less than or equal to 10 percent opacity (daily block average); or b. This option is only for boilers and process heaters

	not subject to PM CEMS or continuous compliance with an opacity limit (i.e., COMS). Maintain the minimum total secondary electric power input of the electrostatic precipitator at or above the operating limits established during the performance test according to § 63.7530(b) and Table 7 to this subpart.
5. Dry scrubber or carbon injection control.	Maintain the minimum sorbent or carbon injection rate as defined in § 63.7575 of this subpart.
6. Any other add-on air pollution control type on units not required to install and operate a PM CEMS.	This option is for boilers and process heaters that operate dry control systems. Existing and new boilers and process heaters must maintain opacity to less than or equal to 10 percent opacity (daily block average).
7. Fuel analysis.....	Maintain the fuel type or fuel mixture such that the applicable emission rates calculated according to § 63.7530(c)(1), (2) and/or (3) is less than the applicable emission limits.
8. Performance testing.....	For boilers and process heaters that demonstrate compliance with a performance test, maintain the operating load of each unit such that is does not exceed 110 percent of the average operating load recorded during the most recent performance test.
9. Continuous Oxygen Monitoring System.	For boilers and process heaters subject to a carbon monoxide emission limit that demonstrate compliance with an O2 CEMS as specified in § 63.7525(a), maintain the oxygen level of the stack gas such that it is not below the lowest hourly average oxygen concentration measured during the most recent CO performance test.

As stated in §63.7520, you must comply with the following requirements for performance testing for existing, new or reconstructed affected sources:

Table 5 to Subpart DDDDD of Part 63_Performance Testing Requirements

To conduct a performance test for the following pollutant...	You must...	Using...
1. Particulate Matter.....	a. Select sampling ports location and the number of traverse points. b. Determine velocity and volumetric flow-	Method 1 at 40 CFR part 60, appendix A-1 of this chapter. Method 2, 2F, or 2G at 40 CFR part 60, appendix A-1 or

	rate of the stack gas..	A-2 to part 60 of this chapter.
	c. Determine oxygen or carbon dioxide concentration of the stack gas.	Method 3A or 3B at 40 CFR part 60, appendix A-2 to part 60 of this chapter, or ANSI/ASME PTC 19.10-1981.\a\
	d. Measure the moisture content of the stack gas.	Method 4 at 40 CFR part 60, appendix A-3 of this chapter.
	e. Measure the particulate matter emission concentration.	Method 5 or 17 (positive pressure fabric filters must use Method 5D) at 40 CFR part 60, appendix A-3 or A-6 of this chapter.
	f. Convert emissions concentration to lb per MMBtu emission rates.	Method 19 F-factor methodology at 40 CFR part 60, appendix A-7 of this chapter.
2. Hydrogen chloride.....	a. Select sampling ports location and the number of traverse points.	Method 1 at 40 CFR part 60, appendix A-1 of this chapter.
	b. Determine velocity and volumetric flow-rate of the stack gas.	Method 2, 2F, or 2G at 40 CFR part 60, appendix A-2 of this chapter.
	c. Determine oxygen or carbon dioxide concentration of the stack gas.	Method 3A or 3B at 40 CFR part 60, appendix A-2 of this chapter, or ANSI/ASME PTC 19.10-1981.\a\
	d. Measure the moisture content of the stack gas.	Method 4 at 40 CFR part 60, appendix A-3 of this chapter.
	e. Measure the hydrogen chloride emission concentration.	Method 26 or 26A (M26 or M26A) at 40 CFR part 60, appendix A-8 of this chapter.
	f. Convert emissions concentration to lb per MMBtu emission rates.	Method 19 F-factor methodology at 40 CFR part 60, appendix A-7 of this chapter.
3. Mercury.....	a. Select sampling ports location and the number of traverse points.	Method 1 at 40 CFR part 60, appendix A-1 of this chapter.
	b. Determine velocity and	Method 2, 2F, or 2G at 40 CFR

	volumetric flow-rate of the stack gas.	part 60, appendix A-1 or A-2 of this chapter.
	c. Determine oxygen or carbon dioxide concentration of the stack gas.	Method 3A or 3B at 40 CFR part 60, appendix A-1 of this chapter, or ANSI/ASME PTC 19.10-1981.\a\
	d. Measure the moisture content of the stack gas.	Method 4 at 40 CFR part 60, appendix A-3 of this chapter.
	e. Measure the mercury emission concentration.	Method 29, 30A, or 30B (M29, M30A, or M30B) at 40 CFR part 60, appendix A-8 of this chapter or Method 101A at 40 CFR part 60, appendix B of this chapter, or ASTM Method D6784.\a\
	f. Convert emissions concentration to lb per MMBtu emission rates.	Method 19 F-factor methodology at 40 CFR part 60, appendix A-7 of this chapter.
4. CO.....	a. Select the sampling ports location and the number of traverse points.	Method 1 at 40 CFR part 60, appendix A-1 of this chapter.
	b. Determine oxygen concentration of the stack gas.	Method 3A or 3B at 40 CFR part 60, appendix A-3 of this chapter, or ASTM D6522-00 (Reapproved 2005), or ANSI/ASME PTC 19.10-1981.\a\
	c. Measure the moisture content of the stack gas.	Method 4 at 40 CFR part 60, appendix A-3 of this chapter.
	d. Measure the CO emission concentration.	Method 10 at 40 CFR part 60, appendix A-4 of this chapter. Use a span value of 2 times the concentration of the applicable emission limit.
5. Dioxins/Furans.....	a. Select the sampling ports location and the number of traverse points.	Method 1 at 40 CFR part 60, appendix A-1 of this chapter.
	b. Determine	Method 3A or 3B

	oxygen concentration of the stack gas.	at 40 CFR part 60, appendix A-3 of this chapter, or ASTM D6522-00 (Reapproved 2005),\a\ or ANSI/ASME PTC 19.10-1981.\a\
	c. Measure the moisture content of the stack gas.	Method 4 at 40 CFR part 60, appendix A-3 of this chapter.
	d. Measure the dioxins/furans emission concentration.	Method 23 at 40 CFR part 60, appendix A-7 of this chapter.
	e. Multiply the measured dioxins/ furans emission concentration by the appropriate toxic equivalency factor.	Table 11 of this subpart.

\a\ Incorporated by reference, see § 63.14.

As stated in §63.7521, you must comply with the following requirements for fuel analysis testing for existing, new or reconstructed affected sources. However, equivalent methods (as defined in §63.7575) may be used in lieu of the prescribed methods at the discretion of the source owner or operator:

Table 6 to Subpart DDDDD of Part 63_Fuel Analysis Requirements

To conduct a fuel analysis for the following pollutant . . .	You must . . .	Using . . .
1. Mercury.....	a. Collect fuel samples.	Procedure in § 63.7521(c) or ASTM D2234/D2234M \a\ (for coal) or ASTM D6323 \a\ (for biomass), or equivalent.
	b. Composite fuel samples.	Procedure in § 63.7521(d) or equivalent.
	c. Prepare composited fuel samples.	EPA SW-846-3050B \a\ (for solid samples), EPA SW-846-3020A \a\ (for liquid samples), ASTM D2013/D2013M \a\ (for coal), ASTM D5198 \a\ (for biomass), or equivalent.
	d. Determine heat content of the fuel type.	ASTM D5865 \a\ (for coal) or ASTM E711 \a\ (for biomass), or equivalent.
	e. Determine moisture content of the fuel type.	ASTM D3173 \a\ or ASTM E871,\a\ or equivalent.
	f. Measure mercury concentration in fuel sample.	ASTM D6722 \a\ (for coal), EPA SW-846-7471B \a\ (for solid samples), or

		EPA SW-846-7470A \a\ (for liquid samples), or equivalent.
	g. Convert concentration into units of pounds of pollutant per MMBtu of heat content.	
2. Hydrogen Chloride.....	a. Collect fuel samples.	Procedure in § 63.7521(c) or ASTM D2234/D2234M \a\ (for coal) or ASTM D6323 \a\ (for biomass), or equivalent.
	b. Composite fuel samples.	Procedure in § 63.7521(d) or equivalent.
	c. Prepare composited fuel samples.	EPA SW-846-3050B \a\ (for solid samples), EPA SW-846-3020A \a\ (for liquid samples), ASTM D2013/D2013M \a\ (for coal), or ASTM D5198 \a\ (for biomass), or equivalent.
	d. Determine heat content of the fuel type.	ASTM D5865 \a\ (for coal) or ASTM E711 \a\ (for biomass), or equivalent.
	e. Determine moisture content of the fuel type.	ASTM D3173 \a\ or ASTM E871,\a\ or equivalent.
	f. Measure chlorine concentration in fuel sample.	EPA SW-846-9250,\a\ ASTM D6721 \a\ (for coal), or ASTM E776 \a\ (for biomass), or equivalent.
	g. Convert concentrations into units of pounds of pollutant per MMBtu of heat content.	
3. Mercury Fuel Specification for other gas 1 fuels.	a. Measure mercury concentration in the fuel sample.	ASTM D5954,\a\ ASTM D6350,\a\ ISO 6978-1:2003(E),\a\
	b. Convert concentration to unit of micrograms/ cubic meter.	or ISO 6978-2:2003(E) \a\, or equivalent.
4. Hydrogen Sulfide Fuel Specification for other gas 1 fuels.	a. Measure total hydrogen sulfide.	ASTM D4084a or equivalent.
	b. Convert to ppm...	

\a\ Incorporated by reference, see § 63.14.

As stated in §63.7520, you must comply with the following requirements for establishing operating limits:

As stated in §63.7540, you must show continuous compliance with the emission limitations for affected sources according to the following:

Table 8 to Subpart DDDDD of Part 63_Demonstrating Continuous Compliance

If you must meet the following operating limits or work practice standards . . .	You must demonstrate continuous compliance by . . .
1. Opacity.....	a. Collecting the opacity monitoring system data according to § 63.7525(c) and § 63.7535; and b. Reducing the opacity monitoring data to 6-minute averages; and c. Maintaining opacity to less than or equal to 10 percent (daily block average).
2. Fabric Filter Bag Leak Detection Operation.	Installing and operating a bag leak detection system according to § 63.7525 and operating the fabric filter such that the requirements in § 63.7540(a)(9) are met.
3. Wet Scrubber Pressure Drop and Liquid Flow-rate.	a. Collecting the pressure drop and liquid flow rate monitoring system data according to §§ 63.7525 and 63.7535; and b. Reducing the data to 12-hour block averages; and c. Maintaining the 12-hour average pressure drop and liquid flow-rate at or above the operating limits established during the performance test according to § 63.7530(b).
4. Wet Scrubber pH.....	a. Collecting the pH monitoring system data according to §§ 63.7525 and 63.7535; and b. Reducing the data to 12-hour block averages; and c. Maintaining the 12-hour average pH at or above the operating limit established during the performance test according to § 63.7530(b).
5. Dry Scrubber Sorbent or Carbon Injection Rate.	a. Collecting the sorbent or carbon injection rate monitoring system data for the dry scrubber according to §§ 63.7525 and 63.7535; and b. Reducing the data to 12-hour block averages; and c. Maintaining the 12-hour average sorbent or carbon injection rate at or above the minimum sorbent or carbon injection rate as defined in § 63.7575.
6. Electrostatic Precipitator Total Secondary Electric Power Input.	a. Collecting the total secondary electric power input monitoring system data for the electrostatic precipitator according to §§ 63.7525 and 63.7535; and b. Reducing the data to 12-hour block averages; and c. Maintaining the 12-hour average total secondary electric power input at or above the operating limits established during the performance test according to § 63.7530(b).
7. Fuel Pollutant Content....	a. Only burning the fuel types and fuel mixtures used to demonstrate compliance with the applicable emission limit according to § 63.7530(b) or (c) as applicable; and b. Keeping monthly records of fuel use according to § 63.7540(a).
8. Oxygen content.....	a. Continuously monitor the oxygen content in the combustion exhaust according to § 63.7525(a).

	b. Reducing the data to 12-hour block averages; and c. Maintain the 12-hour block average oxygen content in the exhaust at or above the lowest hourly average oxygen level measured during the most recent carbon monoxide performance test.
9. Boiler or process heater operating load.	a. Collecting operating load data or steam generation data every 15 minutes. b. Reducing the data to 12-hour block averages; and c. Maintaining the 12-hour average operating load at or below the operating limit established during the performance test according to § 63.7520(c).

As stated in §63.7550, you must comply with the following requirements for reports:

Table 9 to Subpart DDDDD of Part 63_Reporting Requirements

You must submit a(n)	The report must contain . . .	You must submit the report . . .
1. Compliance report.....	a. Information required in § 63.7550(c)(1) through (12); and. b. If there are no deviations from any emission limitation (emission limit and operating limit) that applies to you and there are no deviations from the requirements for work practice standards in Table 3 to this subpart that apply to you, a statement that there were no deviations from the emission limitations and work practice standards during the reporting period. If there were no periods during which the CMSs, including continuous emissions monitoring system, continuous opacity monitoring system, and operating parameter monitoring systems, were out-of-control as specified in § 63.8(c)(7), a statement that there were no periods during which the CMSs were out-of-control during the reporting period; and c. If you have a deviation from any emission limitation (emission limit and operating limit) where you are not using a CMS to comply with that emission limit or operating limit, or a deviation from a work practice standard during the reporting period, the report must contain the information in § 63.7550(d); and d. If there were periods during which the CMSs, including continuous emissions monitoring system, continuous opacity monitoring system, and operating parameter monitoring systems, were out-of-control as specified in § 63.8(c)(7), or otherwise not operating, the report must contain the information in § 63.7550(e).	Semiannually, annually, or biennially according to the requirements in § 63.7550(b).

As stated in §63.7565, you must comply with the applicable General Provisions according to the following:

Table 10 to Subpart DDDDD of Part 63_Applicability of General Provisions to Subpart DDDDD

Citation	Subject	Applies to subpart DDDDD
§ 63.1	Applicability	Yes.
§ 63.2	Definitions	Yes. Additional terms defined in § 63.7575
§ 63.3	Units and Abbreviations.	Yes.
§ 63.4	Prohibited Activities and Circumvention.	Yes.
§ 63.5	Preconstruction Review and Notification Requirements.	Yes.
§ 63.6(a), (b)(1)-(b)(5), (b)(7), (c).	Compliance with Standards and Maintenance Requirements.	Yes.
§ 63.6(e)(1)(i)	General duty to minimize emissions..	No. See § 63.7500(a)(3) for the general duty requirement.
§ 63.6(e)(1)(ii)	Requirement to correct malfunctions as soon as practicable..	No.
§ 63.6(e)(3)	Startup, shutdown, and malfunction plan requirements..	No.
§ 63.6(f)(1)	Startup, shutdown, and malfunction exemptions for compliance with non-opacity emission standards..	No.
§ 63.6(f)(2) and (3)	Compliance with non-opacity emission standards..	Yes.
§ 63.6(g)	Use of alternative standards.	Yes.
§ 63.6(h)(1)	Startup, shutdown, and malfunction exemptions to opacity standards..	No. See § 63.7500(a).
§ 63.6(h)(2) to (h)(9)	Determining compliance with opacity emission standards.	Yes.
§ 63.6(i)	Extension of compliance..	Yes.
§ 63.6(j)	Presidential exemption..	Yes.
§ 63.7(a), (b), (c), and (d).	Performance Testing Requirements.	Yes.
§ 63.7(e)(1)	Conditions for conducting performance tests..	No. Subpart DDDDD specifies conditions for conducting performance tests at § 63.7520(a).
§ 63.7(e)(2)-(e)(9), (f), (g), and (h).	Performance Testing Requirements.	Yes.
§ 63.8(a) and (b)	Applicability and Conduct of Monitoring.	Yes.
§ 63.8(c)(1)	Operation and maintenance of CMS.	Yes.
§ 63.8(c)(1)(i)	General duty to minimize emissions	No. See § 63.7500(a)(3).

	and CMS operation.	
§ 63.8(c)(1)(ii).....	Operation and maintenance of CMS.	Yes.
§ 63.8(c)(1)(iii).....	Startup, shutdown, and malfunction plans for CMS.	No.
§ 63.8(c)(2) to (c)(9)...	Operation and maintenance of CMS.	Yes.
§ 63.8(d)(1) and (2).....	Monitoring Requirements, Quality Control Program.	Yes.
§ 63.8(d)(3).....	Written procedures for CMS.	Yes, except for the last sentence, which refers to a startup, shutdown, and malfunction plan. Startup, shutdown, and malfunction plans are not required.
§ 63.8(e).....	Performance evaluation of a CMS.	Yes.
§ 63.8(f).....	Use of an alternative monitoring method..	Yes.
63.8(g).....	Reduction of monitoring data..	Yes.
§ 63.9.....	Notification Requirements.	Yes.
§ 63.10(a), (b)(1).....	Recordkeeping and Reporting Requirements.	Yes.
§ 63.10(b)(2)(i).....	Recordkeeping of occurrence and duration of startups or shutdowns.	Yes.
§ 63.10(b)(2)(ii).....	Recordkeeping of malfunctions.	No. See § 63.7555(d)(7) for recordkeeping of occurrence and duration and § 63.7555(d)(8) for actions taken during malfunctions.
§ 63.10(b)(2)(iii).....	Maintenance records...	Yes.
§ 63.10(b)(2)(iv) and (v)	Actions taken to minimize emissions during startup, shutdown, or malfunction.	No.
§ 63.10(b)(2)(vi).....	Recordkeeping for CMS malfunctions.	Yes.
§ 63.10(b)(2)(vii) to (xiv).	Other CMS requirements	Yes.
§ 63.10(b)(3).....	Recordkeeping requirements for applicability determinations.	No.
§ 63.10(c)(1) to (9).....	Recordkeeping for sources with CMS.	Yes.
§ 63.10(c)(10) and (11)..	Recording nature and cause of malfunctions, and corrective actions.	No. See § 63.7555(d)(7) for recordkeeping of occurrence

	and duration and § 63.7555(d)(8) for actions taken during malfunctions.	
§ 63.10(c)(12) and (13)..	Recordkeeping for sources with CMS.	Yes.
§ 63.10(c)(15).....	Use of startup, shutdown, and malfunction plan.	No.
§ 63.10(d)(1) and (2)....	General reporting requirements.	Yes.
§ 63.10(d)(3).....	Reporting opacity or visible emission observation results.	No.
§ 63.10(d)(4).....	Progress reports under an extension of compliance.	Yes.
§ 63.10(d)(5).....	Startup, shutdown, and malfunction reports.	No. See § 63.7550(c)(11) for malfunction reporting requirements.
§ 63.10(e) and (f).....	.....	Yes.
§ 63.11.....	Control Device Requirements.	No.
§ 63.12.....	State Authority and Delegation.	Yes.
§ 63.13-63.16.....	Addresses, Incorporation by Reference, Availability of Information, Performance Track Provisions.	Yes.
§ 63.1(a)(5),(a)(7)-(a)(9), (b)(2), (c)(3)-(4), (d), 63.6(b)(6), (c)(3), (c)(4), (d), (e)(2), (e)(3)(ii), (h)(3), (h)(5)(iv), 63.8(a)(3), 63.9(b)(3), (h)(4), 63.10(c)(2)-(4), (c)(9)..	Reserved.....	No.

Table 11 to Subpart DDDDD of Part 63_Toxic Equivalency Factors for Dioxins/Furans

Dioxin/furan congener	Toxic equivalency factor
2,3,7,8-tetrachlorinated dibenzo-p-dioxin.....	1
1,2,3,7,8-pentachlorinated dibenzo-p-dioxin.....	1
1,2,3,4,7,8-hexachlorinated dibenzo-p-dioxin.....	0.1
1,2,3,7,8,9-hexachlorinated dibenzo-p-dioxin.....	0.1
1,2,3,6,7,8-hexachlorinated dibenzo-p-dioxin.....	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzo-p-dioxin..	0.01
octachlorinated dibenzo-p-dioxin.....	0.0003
2,3,7,8-tetrachlorinated dibenzofuran.....	0.1
2,3,4,7,8-pentachlorinated dibenzofuran.....	0.3
1,2,3,7,8-pentachlorinated dibenzofuran.....	0.03
1,2,3,4,7,8-hexachlorinated dibenzofuran.....	0.1
1,2,3,6,7,8-hexachlorinated dibenzofuran.....	0.1
1,2,3,7,8,9-hexachlorinated dibenzofuran.....	0.1
2,3,4,6,7,8-hexachlorinated dibenzofuran.....	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzofuran.....	0.01
1,2,3,4,7,8,9-heptachlorinated dibenzofuran.....	0.01
octachlorinated dibenzofuran.....	0.0003

Table 12 to Subpart DDDDD of Part 63_Alternative Emission Limits for New or Reconstructed Boilers and Process Heaters That Commenced Construction or Reconstruction After June 4, 2010, and Before May 20, 2011

If your boiler or process heater is in this subcategory	For the following pollutants	The emissions must not exceed the following emission limits, except during periods of startup and shutdown	Using this specified sampling volume or test run duration
1. Units in all subcategories designed to burn solid fuel.	a. Mercury.....	3.5E-06 lb per MMBtu of heat input.	For M29, collect a minimum of 2 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784 \a\ collect a minimum of 2 dscm.
2. Units in all subcategories designed to burn solid fuel that combust at least 10 percent biomass/bio-based solids on an annual heat input basis and less than 10 percent coal/solid fossil fuels on an annual heat input basis.	a. Particulate Matter..	0.008 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	Collect a minimum of 1 dscm per run.
	b. Hydrogen Chloride...	0.004 lb per MMBtu of heat input.	For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.
3. Units in all subcategories designed to burn solid fuel that combust at least 10 percent coal/solid fossil fuels on an annual heat input basis and less than 10 percent biomass/bio-based solids on an annual heat input basis.	a. Particulate Matter..	0.0011 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	Collect a minimum of 3 dscm per run.
	b. Hydrogen Chloride...	0.0022 lb per MMBtu of heat input.	For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.
4. Units designed to burn pulverized coal/solid fossil fuel.	a. CO.....	90 ppm by volume on a dry basis corrected to 3 percent oxygen.	1 hr minimum sampling time.
	b. Dioxins/Furans.....	0.003 ng/dscm (TEQ) corrected to 7 percent oxygen.	Collect a minimum of 4 dscm per run.
5. Stokers designed to burn coal/solid fossil fuel.	a. CO.....	7 ppm by volume on a dry basis corrected to 3 percent oxygen.	1 hr minimum sampling time.
	b. Dioxins/Furans.....	0.003 ng/dscm (TEQ) corrected to 7 percent oxygen.	Collect a minimum of 4 dscm per run.
6. Fluidized bed units designed to burn coal/solid fossil fuel.	a. CO.....	30 ppm by volume on a dry basis corrected to 3 percent oxygen.	1 hr minimum sampling time.
	b. Dioxins/Furans.....	0.002 ng/dscm (TEQ) corrected to 7 percent oxygen.	Collect a minimum of 4 dscm per run.
7. Stokers designed to burn biomass/bio-based solids.	a. CO.....	560 ppm by volume on a dry basis corrected to 3 percent oxygen.	1 hr minimum sampling time.
	b. Dioxins/Furans.....	0.005 ng/dscm (TEQ) corrected to 7 percent oxygen.	Collect a minimum of 4 dscm per run.
8. Fluidized bed units designed to burn biomass/bio-based solids.	a. CO.....	260 ppm by volume on a dry basis corrected to 3 percent oxygen.	1 hr minimum sampling time.
	b. Dioxins/Furans.....	0.02 ng/dscm (TEQ)	Collect a minimum of 4

		corrected to 7 percent oxygen.	dscm per run.
9. Suspension burners/Dutch Ovens designed to burn biomass/bio-based solids.	a. CO.....	1,010 ppm by volume on a dry basis corrected to 3 percent oxygen.	1 hr minimum sampling time.
	b. Dioxins/Furans.....	0.2 ng/dscm (TEQ) corrected to 7 percent oxygen.	Collect a minimum of 4 dscm per run.
10. Fuel cells designed to burn biomass/bio-based solids.	a. CO.....	470 ppm by volume on a dry basis corrected to 3 percent oxygen.	1 hr minimum sampling time.
	b. Dioxins/Furans.....	0.003 ng/dscm (TEQ) corrected to 7 percent oxygen.	Collect a minimum of 4 dscm per run.
11. Hybrid suspension/grate units designed to burn biomass/bio-based solids.	a. CO.....	1,500 ppm by volume on a dry basis corrected to 3 percent oxygen.	1 hr minimum sampling time.
	b. Dioxins/Furans.....	0.2 ng/dscm (TEQ) corrected to 7 percent oxygen.	Collect a minimum of 4 dscm per run.
12. Units designed to burn liquid fuel.	a. Particulate Matter..	0.002 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	Collect a minimum of 2 dscm per run.
	b. Hydrogen Chloride...	0.0032 lb per MMBtu of heat input.	For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.
	c. Mercury.....	3.0E-07 lb per MMBtu of heat input.	For M29, collect a minimum of 2 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784 \a\ collect a minimum of 2 dscm.
	d. CO.....	3 ppm by volume on a dry basis corrected to 3 percent oxygen.	1 hr minimum sampling time.
	e. Dioxins/Furans.....	0.002 ng/dscm (TEQ) corrected to 7 percent oxygen.	Collect a minimum of 4 dscm per run.
13. Units designed to burn liquid fuel located in non-continental States and territories.	a. Particulate Matter..	0.002 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	Collect a minimum of 2 dscm per run.
	b. Hydrogen Chloride...	0.0032 lb per MMBtu of heat input.	For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.
	c. Mercury.....	7.8E-07 lb per MMBtu of heat input.	For M29, collect a minimum of 1 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784 \a\ collect a minimum of 2 dscm.
	d. CO.....	51 ppm by volume on a dry basis corrected to 3 percent oxygen.	1 hr minimum sampling time.
	e. Dioxins/Furans.....	0.002 ng/dscm (TEQ)	Collect a minimum of 4

		corrected to 7 percent oxygen.	dscm per run.
14. Units designed to burn gas 2 (other) gases.	a. Particulate Matter..	0.0067 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	Collect a minimum of 1 dscm per run.
	b. Hydrogen Chloride...	0.0017 lb per MMBtu of heat input.	For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.
	c. Mercury.....	7.9E-06 lb per MMBtu of heat input.	For M29, collect a minimum of 1 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784 \a\ collect a minimum of 2 dscm.
	d. CO.....	3 ppm by volume on a dry basis corrected to 3 percent oxygen.	1 hr minimum sampling time.
	e. Dioxins/Furans.....	0.08 ng/dscm (TEQ) corrected to 7 percent oxygen.	Collect a minimum of 4 dscm per run.

\a\ Incorporated by reference, see § 63.14.

Amendment(s) published May 18, 2011, in 76 FR 28662

Effective Date(s): Delay of effective date until further notice

For the reasons set forth above, under the authority at 7 U.S.C. 705, the effective dates of FRL 9272–8, 76 FR 15608 (March 21, 2011), and FRL 9273–4, 76 FR 15704 (March 21, 2011) are delayed until further notice.

Subpart DDDDD—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters

Source: 69 FR 55253, Sept. 13, 2004, unless otherwise noted.

What This Subpart Covers

§ 63.7480 What is the purpose of this subpart?

This subpart establishes national emission limits and work practice standards for hazardous air pollutants (HAP) emitted from industrial, commercial, and institutional boilers and process heaters. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limits and work practice standards.

§ 63.7485 Am I subject to this subpart?

You are subject to this subpart if you own or operate an industrial, commercial, or institutional boiler or process heater as defined in §63.7575 that is located at, or is part of, a major source of HAP as defined in §63.2 or §63.761 (40 CFR part 63, subpart HH, National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities), except as specified in §63.7491.

§ 63.7490 What is the affected source of this subpart?

(a) This subpart applies to new, reconstructed, or existing affected sources as described in paragraphs (a)(1) and (2) of this section.

(1) The affected source of this subpart is the collection of all existing industrial, commercial, and institutional boilers and process heaters within a subcategory located at a major source as defined in §63.7575.

(2) The affected source of this subpart is each new or reconstructed industrial, commercial, or institutional boiler or process heater located at a major source as defined in §63.7575.

(b) A boiler or process heater is new if you commence construction of the boiler or process heater after January 13, 2003, and you meet the applicability criteria at the time you commence construction.

(c) A boiler or process heater is reconstructed if you meet the reconstruction criteria as defined in §63.2, you commence reconstruction after January 13, 2003, and you meet the applicability criteria at the time you commence reconstruction.

(d) A boiler or process heater is existing if it is not new or reconstructed.

§ 63.7491 Are any boilers or process heaters not subject to this subpart?

The types of boilers and process heaters listed in paragraphs (a) through (o) of this section are not subject to this subpart.

(a) A municipal waste combustor covered by 40 CFR part 60, subpart AAAA, subpart BBBB, subpart Cb or subpart Eb.

(b) A hospital/medical/infectious waste incinerator covered by 40 CFR part 60, subpart Ce or subpart Ec.

(c) An electric utility steam generating unit (including a unit covered by 40 CFR part 60, subpart Da) or a Mercury (Hg) Budget unit covered by 40 CFR part 60, subpart HHHH.

(d) A boiler or process heater required to have a permit under section 3005 of the Solid Waste Disposal Act or covered by 40 CFR part 63, subpart EEE (*e.g.* , hazardous waste boilers).

(e) A commercial and industrial solid waste incineration unit covered by 40 CFR part 60, subpart CCCC or subpart DDDD.

(f) A recovery boiler or furnace covered by 40 CFR part 63, subpart MM.

(g) A boiler or process heater that is used specifically for research and development. This does not include units that only provide heat or steam to a process at a research and development facility.

(h) A hot water heater as defined in this subpart.

(i) A refining kettle covered by 40 CFR part 63, subpart X.

(j) An ethylene cracking furnace covered by 40 CFR part 63, subpart YY.

(k) Blast furnace stoves as described in the EPA document, entitled “National Emission Standards for Hazardous Air Pollutants (NESHAP) for Integrated Iron and Steel Plants—Background Information for Proposed Standards,” (EPA–453/R–01–005).

(l) Any boiler and process heater specifically listed as an affected source in another standard(s) under 40 CFR part 63.

(m) Any boiler and process heater specifically listed as an affected source in another standard(s) established under section 129 of the Clean Air Act (CAA).

(n) Temporary boilers as defined in this subpart.

(o) Blast furnace gas fuel-fired boilers and process heaters as defined in this subpart.

[69 FR 55253, Sept. 13, 2004, as amended at 71 FR 70660, Dec. 6, 2006]

§ 63.7495 When do I have to comply with this subpart?

(a) If you have a new or reconstructed boiler or process heater, you must comply with this subpart by November 12, 2004 or upon startup of your boiler or process heater, whichever is later.

(b) If you have an existing boiler or process heater, you must comply with this subpart no later than September 13, 2007.

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, paragraphs (c)(1) and (2) of this section apply to you.

(1) Any new or reconstructed boiler or process heater at the existing facility must be in compliance with this subpart upon startup.

(2) Any existing boiler or process heater at the existing facility must be in compliance with this subpart within 3 years after the facility becomes a major source.

(d) You must meet the notification requirements in §63.7545 according to the schedule in §63.7545 and in subpart A of this part. Some of the notifications must be submitted before you are required to comply with the emission limits and work practice standards in this subpart.

Emission Limits and Work Practice Standards

§ 63.7499 What are the subcategories of boilers and process heaters?

The subcategories of boilers and process heaters are large solid fuel, limited use solid fuel, small solid fuel, large liquid fuel, limited use liquid fuel, small liquid fuel, large gaseous fuel, limited use gaseous fuel, and small gaseous fuel. Each subcategory is defined in §63.7575.

§ 63.7500 What emission limits, work practice standards, and operating limits must I meet?

(a) You must meet the requirements in paragraphs (a)(1) and (2) of this section.

(1) You must meet each emission limit and work practice standard in Table 1 to this subpart that applies to your boiler or process heater, except as provided under §63.7507.

(2) You must meet each operating limit in Tables 2 through 4 to this subpart that applies to your boiler or process heater. If you use a control device or combination of control devices not covered in Tables 2 through 4 to this subpart, or you wish to establish and monitor an alternative operating limit and alternative monitoring parameters, you must apply to the United States Environmental Protection Agency (EPA) Administrator for approval of alternative monitoring under §63.8(f).

(b) As provided in §63.6(g), EPA may approve use of an alternative to the work practice standards in this section.

General Compliance Requirements

§ 63.7505 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limits (including operating limits) and the work practice standards in this subpart at all times, except during periods of startup, shutdown, and malfunction.

(b) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.6(e)(1)(i).

(c) You can demonstrate compliance with any applicable emission limit using fuel analysis if the emission rate calculated according to §63.7530(d) is less than the applicable emission limit. Otherwise, you must demonstrate compliance using performance testing.

(d) If you demonstrate compliance with any applicable emission limit through performance testing, you must develop a site-specific monitoring plan according to the requirements in paragraphs (d)(1) through (4) of this section. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under §63.8(f).

(1) For each continuous monitoring system (CMS) required in this section, you must develop and submit to the EPA Administrator for approval a site-specific monitoring plan that addresses paragraphs (d)(1)(i) through (iii) of this section. You must submit this site-specific monitoring plan at least 60 days before your initial performance evaluation of your CMS.

(i) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.* , on or downstream of the last control device);

(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and

(iii) Performance evaluation procedures and acceptance criteria (*e.g.* , calibrations).

(2) In your site-specific monitoring plan, you must also address paragraphs (d)(2)(i) through (iii) of this section.

(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), and (c)(4)(ii);

(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and

(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).

(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.

(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

(e) If you have an applicable emission limit or work practice standard, you must develop a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in §63.6(e)(3).

[69 FR 55253, Sept. 13, 2004, as amended at 71 FR 20467, Apr. 20, 2006]

§ 63.7506 Do any boilers or process heaters have limited requirements?

(a) New or reconstructed boilers and process heaters in the large liquid fuel subcategory or the limited use liquid fuel subcategory that burn only fossil fuels and other gases and do not burn any residual oil are subject to the emission limits and applicable work practice standards in Table 1 to this subpart. You are not required to conduct a performance test to demonstrate compliance with the emission limits. You are not required to set and maintain operating limits to demonstrate continuous compliance with the emission limits. However, you must meet the requirements in paragraphs (a)(1) and (2) of this section and meet the CO work practice standard in Table 1 to this subpart.

(1) To demonstrate initial compliance, you must include a signed statement in the Notification of Compliance Status report required in §63.7545(e) that indicates you burn only liquid fossil fuels other than residual oils, either alone or in combination with gaseous fuels.

(2) To demonstrate continuous compliance with the applicable emission limits, you must also keep records that demonstrate that you burn only liquid fossil fuels other than residual oils, either alone or in combination with gaseous fuels. You must also include a signed statement in each semiannual compliance report required in §63.7550 that indicates you burned only liquid fossil fuels other than residual oils, either alone or in combination with gaseous fuels, during the reporting period.

(b) The affected boilers and process heaters listed in paragraphs (b)(1) through (3) of this section are subject to only the initial notification requirements in §63.9(b) (*i.e.* , they are not subject to the emission limits, work practice standards, performance testing, monitoring, SSMP, site-specific monitoring plans, recordkeeping and reporting requirements of this subpart or any other requirements in subpart A of this part).

(1) Existing large and limited use gaseous fuel units.

(2) Existing large and limited use liquid fuel units.

(3) New or reconstructed small liquid fuel units that burn only gaseous fuels or distillate oil. New or reconstructed small liquid fuel boilers and process heaters that commence burning of any other type of liquid fuel must comply with all applicable requirements of this subpart and subpart A of this part upon startup of burning the other type of liquid fuel.

(c) The affected boilers and process heaters listed in paragraphs (c)(1) through (4) of this section are not subject to the initial notification requirements in §63.9(b) and are not subject to any requirements in this subpart or in subpart A of this part (*i.e.* , they are not subject to the emission limits, work practice standards, performance testing, monitoring, SSM plans, site-specific monitoring plans, recordkeeping and reporting requirements of this subpart, or any other requirements in subpart A of this part.

(1) Existing small solid fuel boilers and process heaters.

(2) Existing small liquid fuel boilers and process heaters.

(3) Existing small gaseous fuel boilers and process heaters.

(4) New or reconstructed small gaseous fuel units.

§ 63.7507 What are the health-based compliance alternatives for the hydrogen chloride (HCl) and total selected metals (TSM) standards?

(a) As an alternative to the requirement to demonstrate compliance with the HCl emission limit in table 1 to this subpart, you may demonstrate eligibility for the health-based compliance alternative for HCl emissions under the procedures prescribed in appendix A to this subpart.

(b) As an alternative to the requirement to demonstrate compliance with the TSM emission limit in table 1 to this subpart based on the sum of emissions for the eight selected metals, you may demonstrate eligibility for the health-based alternative for manganese emissions under the procedures prescribed in appendix A to this subpart and comply with the TSM emission standards in table 1 based on the sum of emissions for seven selected metals (by excluding manganese emissions from the summation of TSM emissions).

[70 FR 76933, Dec. 28, 2005]

Testing, Fuel Analyses, and Initial Compliance Requirements

§ 63.7510 What are my initial compliance requirements and by what date must I conduct them?

(a) For affected sources that elect to demonstrate compliance with any of the emission limits of this subpart through performance testing, your initial compliance requirements include conducting performance tests according to §63.7520 and Table 5 to this subpart, conducting a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart, establishing operating limits according to §63.7530 and Table 7 to this subpart, and conducting CMS performance evaluations according to §63.7525. For affected sources that burn a single type of fuel, you are exempted from the initial compliance requirements of conducting a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart.

(b) For affected sources that elect to demonstrate compliance with the emission limits for HCl, mercury, or TSM through fuel analysis, your initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart and establish operating limits according to §63.7530 and Table 8 to this subpart.

(c) For affected sources that have an applicable work practice standard, your initial compliance requirements depend on the subcategory and rated capacity of your boiler or process heater. If your boiler or process heater is in any of the limited use subcategories or has a heat input capacity less than 100 MMBtu per hour, your initial compliance demonstration is conducting a performance test for carbon monoxide according to Table 5 to this subpart. If your boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 MMBtu per hour or greater, your initial compliance demonstration is conducting a performance evaluation of your continuous emission monitoring system for carbon monoxide according to §63.7525(a).

(d) For existing affected sources, you must demonstrate initial compliance no later than 180 days after the compliance date that is specified for your source in §63.7495 and according to the applicable provisions in §63.7(a)(2) as cited in Table 10 to this subpart.

(e) If your new or reconstructed affected source commenced construction or reconstruction between January 13, 2003 and November 12, 2004, you must demonstrate initial compliance with either the proposed emission limits and work practice standards or the promulgated emission limits and work practice standards no later than 180 days after November 12, 2004 or within 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(f) If your new or reconstructed affected source commenced construction or reconstruction between January 13, 2003, and November 12, 2004, and you chose to comply with the proposed emission limits and work practice standards when demonstrating initial compliance, you must conduct a second compliance demonstration for the promulgated emission limits and work practice standards within 3 years after November 12, 2004 or within 3 years after startup of the affected source, whichever is later.

(g) If your new or reconstructed affected source commences construction or reconstruction after November 12, 2004, you must demonstrate initial compliance with the promulgated emission limits and work practice standards no later than 180 days after startup of the source.

[69 FR 55253, Sept. 13, 2004, as amended at 71 FR 70660, Dec. 6, 2006]

§ 63.7515 When must I conduct subsequent performance tests or fuel analyses?

(a) You must conduct all applicable performance tests according to §63.7520 on an annual basis, unless you follow the requirements listed in paragraphs (b) through (d) of this section. Annual performance tests must be completed between 10 and 12 months after the previous performance test, unless you follow the requirements listed in paragraphs (b) through (d) of this section.

(b) You can conduct performance tests less often for a given pollutant if your performance tests for the pollutant (particulate matter, HCl, mercury, or TSM) for at least 3 consecutive years show that you comply with the emission limit. In this case, you do not have to conduct a performance test for that pollutant for the next 2 years. You must conduct a performance test during the third year and no more than 36 months after the previous performance test.

(c) If your boiler or process heater continues to meet the emission limit for particulate matter, HCl, mercury, or TSM, you may choose to conduct performance tests for these pollutants every third year, but each such performance test must be conducted no more than 36 months after the previous performance test.

(d) If a performance test shows noncompliance with an emission limit for particulate matter, HCl, mercury, or TSM, you must conduct annual performance tests for that pollutant until all performance tests over a consecutive 3-year period show compliance.

(e) If you have an applicable work practice standard for carbon monoxide and your boiler or process heater is in any of the limited use subcategories or has a heat input capacity less than 100 MMBtu per hour, you must conduct annual performance tests for carbon monoxide according to §63.7520. Each annual performance test must be conducted between 10 and 12 months after the previous performance test.

(f) You must conduct a fuel analysis according to §63.7521 for each type of fuel burned no later than 5 years after the previous fuel analysis for each fuel type. If you burn a new type of fuel, you must conduct a fuel analysis before burning the new type of fuel in your boiler or process heater. You must still meet all applicable continuous compliance requirements in §63.7540.

(g) You must report the results of performance tests and fuel analyses within 60 days after the completion of the performance tests or fuel analyses. This report should also verify that the operating limits for your affected source have not changed or provide documentation of revised operating parameters established according to §63.7530 and Table 7 to this subpart, as applicable. The reports for all subsequent performance tests and fuel analyses should include all applicable information required in §63.7550.

§ 63.7520 What performance tests and procedures must I use?

(a) You must conduct all performance tests according to §63.7(c), (d), (f), and (h). You must also develop a site-specific test plan according to the requirements in §63.7(c) if you elect to demonstrate compliance through performance testing.

(b) You must conduct each performance test according to the requirements in Table 5 to this subpart.

(c) New or reconstructed boilers or process heaters in one of the liquid fuel subcategories that burn only fossil fuels and other gases and do not burn any residual oil must demonstrate compliance according to §63.7506(a).

(d) You must conduct each performance test under the specific conditions listed in Tables 5 and 7 to this subpart. You must conduct performance tests at the maximum normal operating load while burning the type of fuel or mixture of fuels that have the highest content of chlorine, mercury, and total selected metals, and you must demonstrate initial compliance and establish your operating limits based on these tests. These requirements could result in the need to conduct more than one performance test.

(e) You may not conduct performance tests during periods of startup, shutdown, or malfunction.

(f) You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour.

(g) To determine compliance with the emission limits, you must use the F-Factor methodology and equations in sections 12.2 and 12.3 of EPA Method 19 of appendix A to part 60 of this chapter to convert the measured particulate matter concentrations, the measured HCl concentrations, the measured TSM concentrations, and the measured mercury concentrations that result from the initial performance test to pounds per million Btu heat input emission rates using F-factors.

§ 63.7521 What fuel analyses and procedures must I use?

(a) You must conduct fuel analyses according to the procedures in paragraphs (b) through (e) of this section and Table 6 to this subpart, as applicable.

(b) You must develop and submit a site-specific fuel analysis plan to the EPA Administrator for review and approval according to the following procedures and requirements in paragraphs (b)(1) and (2) of this section.

(1) You must submit the fuel analysis plan no later than 60 days before the date that you intend to demonstrate compliance.

(2) You must include the information contained in paragraphs (b)(2)(i) through (vi) of this section in your fuel analysis plan.

(i) The identification of all fuel types anticipated to be burned in each boiler or process heater.

(ii) For each fuel type, the notification of whether you or a fuel supplier will be conducting the fuel analysis.

(iii) For each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if your procedures are different from paragraph (c) or (d) of this section. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing with other dissimilar fuel types.

(iv) For each fuel type, the analytical methods, with the expected minimum detection levels, to be used for the measurement of selected total metals, chlorine, or mercury.

(v) If you request to use an alternative analytical method other than those required by Table 6 to this subpart, you must also include a detailed description of the methods and procedures that will be used.

(vi) If you will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 to this subpart.

(c) At a minimum, you must obtain three composite fuel samples for each fuel type according to the procedures in paragraph (c)(1) or (2) of this section.

(1) If sampling from a belt (or screw) feeder, collect fuel samples according to paragraphs (c)(1)(i) and (ii) of this section.

(i) Stop the belt and withdraw a 6-inch wide sample from the full cross-section of the stopped belt to obtain a minimum two pounds of sample. Collect all the material (fines and coarse) in the full cross-section. Transfer the sample to a clean plastic bag.

(ii) Each composite sample will consist of a minimum of three samples collected at approximately equal intervals during the testing period.

(2) If sampling from a fuel pile or truck, collect fuel samples according to paragraphs (c)(2)(i) through (iii) of this section.

(i) For each composite sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile.

(ii) At each sampling site, dig into the pile to a depth of 18 inches. Insert a clean flat square shovel into the hole and withdraw a sample, making sure that large pieces do not fall off during sampling.

(iii) Transfer all samples to a clean plastic bag for further processing.

(d) Prepare each composite sample according to the procedures in paragraphs (d)(1) through (7) of this section.

(1) Throughly mix and pour the entire composite sample over a clean plastic sheet.

(2) Break sample pieces larger than 3 inches into smaller sizes.

(3) Make a pie shape with the entire composite sample and subdivide it into four equal parts.

(4) Separate one of the quarter samples as the first subset.

(5) If this subset is too large for grinding, repeat the procedure in paragraph (d)(3) of this section with the quarter sample and obtain a one-quarter subset from this sample.

(6) Grind the sample in a mill.

(7) Use the procedure in paragraph (d)(3) of this section to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

(e) Determine the concentration of pollutants in the fuel (mercury, chlorine, and/or total selected metals) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 to this subpart.

§ 63.7522 Can I use emission averaging to comply with this subpart?

(a) As an alternative to meeting the requirements of §63.7500, if you have more than one existing large solid fuel boiler located at your facility, you may demonstrate compliance by emission averaging according to the procedures in this section in a State that does not choose to exclude emission averaging.

(b) Separate stack requirements. For a group of two or more existing large solid fuel boilers that each vent to a separate stack, you may average particulate matter or TSM, HCl and mercury emissions to demonstrate compliance with the limits in Table 1 to this subpart if you satisfy the requirements in paragraphs (c), (d), (e), (f), and (g) of this section.

(c) For each existing large solid fuel boiler in the averaging group, the emission rate achieved during the initial compliance test for the HAP being averaged must not exceed the emission level that was being achieved on November 12, 2004 or the control technology employed during the initial compliance test must not be less effective for the HAP being averaged than the control technology employed on November 12, 2004.

(d) The emissions rate from the existing large solid fuel boilers participating in the emissions averaging option must be in compliance with the limits in Table 1 to this subpart at all times following the compliance date specified in §63.7495.

(e) You must demonstrate initial compliance according to paragraph (e)(1) or (2) of this section.

(1) You must use Equation 1 of this section to demonstrate that the particulate matter or TSM, HCl, and mercury emissions from all existing large solid fuel boilers participating in the emissions averaging option do not exceed the emission limits in Table 1 to this subpart.

$$\text{Ave Weighted Emissions} = \sum_{i=1}^{n}(Er \times Hm) \div \sum_{i=1}^{n} Hm \qquad \text{(Eq. 1)}$$

Where:

Ave Weighted Emissions = Average weighted emissions for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

Er = Emission rate (as calculated according to Table 5 to this subpart or by fuel analysis (as calculated by the applicable equation in §63.7530(d))) for boiler, i, for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

Hm = Maximum rated heat input capacity of boiler, i, in units of million Btu per hour.

n = Number of large solid fuel boilers participating in the emissions averaging option.

(2) If you are not capable of monitoring heat input, you may use Equation 2 of this section as an alternative to using Equation 1 of this section to demonstrate that the particulate matter or TSM, HCl, and mercury emissions from all existing large solid fuel boilers participating in the emissions averaging option do not exceed the emission limits in Table 1 to this subpart.

$$\text{Ave Weighted Emissions} = \sum_{i=1}^{n}(Er \times Sm \times Cf) \div \sum_{i=1}^{n} Sm \times Cf \qquad \text{(Eq. 2)}$$

Where:

Ave Weighted Emissions = Average weighted emission level for PM or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

Er = Emission rate (as calculated according to Table 5 to this subpart or by fuel analysis (as calculated by the applicable equation in §63.7530(d))) for boiler, i, for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

Sm = Maximum steam generation by boiler, i, in units of pounds.

Cf = Conversion factor, calculated from the most recent compliance test, in units of million Btu of heat input per pounds of steam generated.

(f) You must demonstrate continuous compliance on a monthly basis determined at the end of every month (12 times per year) according to paragraphs (f)(1) through (3) of this section. The first monthly period begins on the compliance date specified in §63.7495.

(1) For each calendar month, you must use Equation 3 of this section to calculate the monthly average weighted emission rate using the actual heat capacity for each existing large solid fuel boiler participating in the emissions averaging option.

$$\text{Ave Weighted Emissions} = \sum_{i=1}^{n}(Er \times Hb) \div \sum_{i=1}^{n} Hb \qquad \text{(Eq. 3)}$$

Where:

Ave Weighted Emissions = monthly average weighted emission level for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

Er = Emission rate, (as calculated during the most recent compliance test, (as calculated according to Table 5 to this subpart) or fuel analysis (as calculated by the applicable equation in §63.7530(d)) for boiler, i, for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

Hb = The average heat input for each calendar month of boiler, i, in units of million Btu.

n = Number of large solid fuel boilers participating in the emissions averaging option.

(2) If you are not capable of monitoring heat input, you may use Equation 4 of this section as an alternative to using Equation 3 of this section to calculate the monthly weighted emission rate using the actual steam generation from the large solid fuel boilers participating in the emissions averaging option.

$$\text{Ave Weighted Emissions} = \sum_{i=1}^{n}(Er \times Sa \times Cf) \div \sum_{i=1}^{n} Sa \times Cf \qquad \text{(Eq. 4)}$$

Where:

Ave Weighted Emissions = monthly average weighted emission level for PM or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

Er = Emission rate, (as calculated during the most recent compliance test (as calculated according to Table 5 to this subpart) or by fuel analysis (as calculated by the applicable equation in §63.7530(d))) for boiler, i, for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

Sa = Actual steam generation for each calendar month by boiler, i, in units of pounds.

Cf = Conversion factor, as calculated during the most recent compliance test, in units of million Btu of heat input per pounds of steam generated.

(3) Until 12 monthly weighted average emission rates have been accumulated, calculate and report only the monthly average weighted emission rate determined under paragraph (f)(1) or (2) of this section. After 12 monthly weighted average emission rates have been accumulated, for each subsequent calendar month, use Equation 4A of this section to calculate the 12-month rolling average of the monthly weighted average emission rates for the current month and the previous 11 months.

$$E_{avg} = \frac{\sum_{i=1}^{n} ER_i}{12} \qquad \text{(Eq. 4A)}$$

Where:

Eavg = 12-month rolling average emission rate, (pounds per million Btu heat input)

ERi = Monthly weighted average, for month “i”, (pounds per million Btu heat input)(as calculated by (f)(1) or (2))

(g) You must develop and submit an implementation plan for emission averaging to the applicable regulatory authority for review and approval according to the following procedures and requirements in paragraphs (g)(1) through (4).

(1) You must submit the implementation plan no later than 180 days before the date that the facility intends to demonstrate compliance using the emission averaging option.

(2) You must include the information contained in paragraphs (g)(2)(i) through (vii) of this section in your implementation plan for all emission sources included in an emissions average:

(i) The identification of all existing large solid fuel boilers in the averaging group, including for each either the applicable HAP emission level or the control technology installed on;

(ii) The process parameter (heat input or steam generated) that will be monitored for each averaging group of large solid fuel boilers;

(iii) The specific control technology or pollution prevention measure to be used for each emission source in the averaging group and the date of its installation or application. If the pollution prevention measure reduces or eliminates emissions from multiple sources, the owner or operator must identify each source;

(iv) The test plan for the measurement of particulate matter (or TSM), HCl, or mercury emissions in accordance with the requirements in §63.7520;

(v) The operating parameters to be monitored for each control system or device and a description of how the operating limits will be determined;

(vi) If you request to monitor an alternative operating parameter pursuant to §63.7525, you must also include:

(A) A description of the parameter(s) to be monitored and an explanation of the criteria used to select the parameter(s); and

(B) A description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation of the control device; the frequency and content of monitoring, reporting, and recordkeeping requirements; and a demonstration, to the satisfaction of the applicable regulatory authority, that the proposed monitoring frequency is sufficient to represent control device operating conditions; and

(vii) A demonstration that compliance with each of the applicable emission limit(s) will be achieved under representative operating conditions.

(3) Upon receipt, the regulatory authority shall review and approve or disapprove the plan according to the following criteria:

(i) Whether the content of the plan includes all of the information specified in paragraph (g)(2) of this section; and

(ii) Whether the plan presents sufficient information to determine that compliance will be achieved and maintained.

(4) The applicable regulatory authority shall not approve an emission averaging implementation plan containing any of the following provisions:

(i) Any averaging between emissions of differing pollutants or between differing sources; or

(ii) The inclusion of any emission source other than an existing large solid fuel boiler.

(h) Common stack requirements. For a group of two or more existing large solid fuel boilers, each of which vents through a single common stack, you may average particulate matter or TSM, HCl and mercury to demonstrate compliance with the limits in Table 1 to this subpart if you satisfy the requirements in paragraph (i) or (j) of this section.

(i) For a group of two or more existing large solid fuel boilers, each of which vents through a common emissions control system to a common stack, that does not receive emissions from units in other subcategories or categories, you may treat such averaging group as a single existing solid fuel boiler for purposes of this subpart and comply with the requirements of this subpart as if the group were a single boiler.

(j) For all other groups of boilers subject to paragraph (h) of this section, the owner or operator may elect to:

(1) Conduct performance tests according to procedures specified in §63.7520 in the common stack (if affected units from other subcategories (*e.g.* , gas-fired units) or nonaffected units vent to the common stack, the units from other subcategories and nonaffected units must be shut down or vented to a different stack during the performance test); and

(2) Meet the applicable operating limit specified in §63.7540 and Table 8 to this subpart for each emissions control system (except that, if each boiler venting to the common stack has an applicable opacity operating limit, then a single continuous opacity monitoring system may be located in the common stack instead of in each duct to the common stack).

(k) *Combination requirements.* The common stack of a group of two or more boilers subject to paragraph (h) of this section may be treated as a separate stack for purposes of paragraph (b) of this section and included in an emissions averaging group subject to paragraph (b) of this section.

[69 FR 55253, Sept. 13, 2004, as amended at 71 FR 70660, Dec. 6, 2006]

§ 63.7525 What are my monitoring, installation, operation, and maintenance requirements?

(a) If you have an applicable work practice standard for carbon monoxide, and your boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 MMBtu per hour or greater, you must install, operate, and maintain a continuous emission monitoring system (CEMS) for carbon monoxide and oxygen according to the procedures in paragraphs (a)(1) through (6) of this section by the compliance date specified in §63.7495. The carbon monoxide and oxygen shall be monitored at the same location at the outlet of the boiler or process heater.

(1) Each CEMS must be installed, operated, and maintained according to the applicable procedures under Performance Specification (PS) 3 or 4A of 40 CFR part 60, appendix B, and according to the site-specific monitoring plan developed according to §63.7505(d).

(2) You must conduct a performance evaluation of each CEMS according to the requirements in §63.8 and according to PS 4A of 40 CFR part 60, appendix B.

(3) Each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(4) The CEMS data must be reduced as specified in §63.8(g)(2).

(5) You must calculate and record a 30-day rolling average emission rate on a daily basis. A new 30-day rolling average emission rate is calculated as the average of all of the hourly CO emission data for the preceding 30 operating days.

(6) For purposes of calculating data averages, you must not use data recorded during periods of monitoring malfunctions, associated repairs, out-of-control periods, required quality assurance or control activities, or when your boiler or process heater is operating at less than 50 percent of its rated capacity. You must use all the data collected during all other periods in assessing compliance. Any period for which the monitoring system is out of control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

(b) If you have an applicable opacity operating limit, you must install, operate, certify and maintain each continuous opacity monitoring system (COMS) according to the procedures in paragraphs (b)(1) through (7) of this section by the compliance date specified in §63.7495.

(1) Each COMS must be installed, operated, and maintained according to PS 1 of 40 CFR part 60, appendix B.

(2) You must conduct a performance evaluation of each COMS according to the requirements in §63.8 and according to PS 1 of 40 CFR part 60, appendix B.

(3) As specified in §63.8(c)(4)(i), each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(4) The COMS data must be reduced as specified in §63.8(g)(2).

(5) You must include in your site-specific monitoring plan procedures and acceptance criteria for operating and maintaining each COMS according to the requirements in §63.8(d). At a minimum, the monitoring plan must include a daily calibration drift assessment, a quarterly performance audit, and an annual zero alignment audit of each COMS.

(6) You must operate and maintain each COMS according to the requirements in the monitoring plan and the requirements of §63.8(e). Identify periods the COMS is out of control including any periods that the COMS fails to pass a daily calibration drift assessment, a quarterly performance audit, or an annual zero alignment audit.

(7) You must determine and record all the 6-minute averages (and 1-hour block averages as applicable) collected for periods during which the COMS is not out of control.

(c) If you have an operating limit that requires the use of a CMS, you must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the procedures in paragraphs (c)(1) through (5) of this section by the compliance date specified in §63.7495.

(1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data.

(2) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must conduct all monitoring in continuous operation at all times that the unit is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(3) For purposes of calculating data averages, you must not use data recorded during monitoring malfunctions, associated repairs, out of control periods, or required quality assurance or control activities. You must use all the data collected during all other periods in assessing compliance. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

(4) Determine the 3-hour block average of all recorded readings, except as provided in paragraph (c)(3) of this section.

(5) Record the results of each inspection, calibration, and validation check.

(d) If you have an operating limit that requires the use of a flow measurement device, you must meet the requirements in paragraphs (c) and (d)(1) through (4) of this section.

(1) Locate the flow sensor and other necessary equipment in a position that provides a representative flow.

(2) Use a flow sensor with a measurement sensitivity of 2 percent of the flow rate.

(3) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(4) Conduct a flow sensor calibration check at least semiannually.

(e) If you have an operating limit that requires the use of a pressure measurement device, you must meet the requirements in paragraphs (c) and (e)(1) through (6) of this section.

(1) Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure.

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(3) Use a gauge with a minimum tolerance of 1.27 centimeters of water or a transducer with a minimum tolerance of 1 percent of the pressure range.

(4) Check pressure tap pluggage daily.

(5) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.

(6) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.

(f) If you have an operating limit that requires the use of a pH measurement device, you must meet the requirements in paragraphs (c) and (f)(1) through (3) of this section.

(1) Locate the pH sensor in a position that provides a representative measurement of scrubber effluent pH.

(2) Ensure the sample is properly mixed and representative of the fluid to be measured.

(3) Check the pH meter's calibration on at least two points every 8 hours of process operation.

(g) If you have an operating limit that requires the use of equipment to monitor voltage and secondary current (or total power input) of an electrostatic precipitator (ESP), you must use voltage and secondary current monitoring equipment to measure voltage and secondary current to the ESP.

(h) If you have an operating limit that requires the use of equipment to monitor sorbent injection rate (*e.g.* , weigh belt, weigh hopper, or hopper flow measurement device), you must meet the requirements in paragraphs (c) and (h)(1) through (3) of this section.

(1) Locate the device in a position(s) that provides a representative measurement of the total sorbent injection rate.

(2) Install and calibrate the device in accordance with manufacturer's procedures and specifications.

(3) At least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.

(i) If you elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (i)(1) through (8) of this section.

(1) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.

(2) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with the guidance provided in EPA–454/R–98–015, September 1997.

(3) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less.

(4) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.

(5) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

(6) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.

(7) For positive pressure fabric filter systems that do not duct all compartments of cells to a common stack, a bag leak detection system must be installed in each baghouse compartment or cell.

(8) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

[69 FR 55253, Sept. 13, 2004, as amended at 71 FR 70662, Dec. 6, 2006]

§ 63.7530 How do I demonstrate initial compliance with the emission limits and work practice standards?

(a) You must demonstrate initial compliance with each emission limit and work practice standard that applies to you by either conducting initial performance tests and establishing operating limits, as applicable, according to §63.7520, paragraph (c) of this section, and Tables 5 and 7 to this subpart OR conducting initial fuel analyses to determine emission rates and establishing operating limits, as applicable, according to §63.7521, paragraph (d) of this section, and Tables 6 and 8 to this subpart.

(b) New or reconstructed boilers or process heaters in one of the liquid fuel subcategories that burn only fossil fuels and other gases and do not burn any residual oil must demonstrate compliance according to §63.7506(a).

(c) If you demonstrate compliance through performance testing, you must establish each site-specific operating limit in Tables 2 through 4 to this subpart that applies to you according to the requirements in §63.7520, Table 7 to this subpart, and paragraph (c)(4) of this section, as applicable. You must also conduct fuel analyses according to §63.7521 and establish maximum fuel pollutant input levels according to paragraphs (c)(1) through (3) of this section, as applicable.

(1) You must establish the maximum chlorine fuel input (C_{input}) during the initial performance testing according to the procedures in paragraphs (c)(1)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.

(ii) During the performance testing for HCl, you must determine the fraction of the total heat input for each fuel type burned (Q_i) based on the fuel mixture that has the highest content of chlorine, and the average chlorine concentration of each fuel type burned (C_i).

(iii) You must establish a maximum chlorine input level using Equation 5 of this section.

$$Cl_{input} = \sum_{i=1}^{n}\left[(C_i)(Q_i)\right] \qquad (Eq.\ 5)$$

Where:

Cl_{input}= Maximum amount of chlorine entering the boiler or process heater through fuels burned in units of pounds per million Btu.

C_i= Arithmetic average concentration of chlorine in fuel type, i, analyzed according to §63.7521, in units of pounds per million Btu.

Q_i= Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types during the performance testing, it is not necessary to determine the value of this term. Insert a value of “1” for Q_i.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.

(2) If you choose to comply with the alternative TSM emission limit instead of the particulate matter emission limit, you must establish the maximum TSM fuel input level (TSM_{input}) during the initial performance testing according to the procedures in paragraphs (c)(2)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of TSM.

(ii) During the performance testing for TSM, you must determine the fraction of total heat input from each fuel burned (Q_i) based on the fuel mixture that has the highest content of total selected metals, and the average TSM concentration of each fuel type burned (M_i).

(iii) You must establish a baseline TSM input level using Equation 6 of this section.

$$TSM_{input} = \sum_{i=1}^{n}\left[(M_i)(Q_i)\right] \qquad (Eq.\ 6)$$

Where:

TSM_{input}= Maximum amount of TSM entering the boiler or process heater through fuels burned in units of pounds per million Btu.

M_i= Arithmetic average concentration of TSM in fuel type, i, analyzed according to §63.7521, in units of pounds per million Btu.

Q_i= Fraction of total heat input from based fuel type, i, based on the fuel mixture that has the highest content of TSM. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of “1” for Q_i.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of TSM.

(3) You must establish the maximum mercury fuel input level ($Mercury_{input}$) during the initial performance testing using the procedures in paragraphs (c)(3)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of mercury.

(ii) During the compliance demonstration for mercury, you must determine the fraction of total heat input for each fuel burned (Q_i) based on the fuel mixture that has the highest content of mercury, and the average mercury concentration of each fuel type burned (HG_i).

(iii) You must establish a maximum mercury input level using Equation 7 of this section.

$$Mercury_{input} = \sum_{i=1}^{n}\left[(HG_i)(Q_i)\right] \qquad (Eq.\ 7)$$

Where:

$Mercury_{input}$= Maximum amount of mercury entering the boiler or process heater through fuels burned in units of pounds per million Btu.

HG_i= Arithmetic average concentration of mercury in fuel type, i, analyzed according to §63.7521, in units of pounds per million Btu.

Q_i= Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of “1” for Q_i.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of mercury.

(4) You must establish parameter operating limits according to paragraphs (c)(4)(i) through (iv) of this section.

(i) For a wet scrubber, you must establish the minimum scrubber effluent pH, liquid flowrate, and pressure drop as defined in §63.7575, as your operating limits during the three-run performance test. If you use a wet scrubber and you conduct separate performance tests for particulate matter, HCl, and mercury emissions, you must establish one set of minimum scrubber effluent pH, liquid flowrate, and pressure drop operating limits. The minimum scrubber effluent pH operating limit must be established during the HCl performance test. If you conduct multiple performance tests, you must set the minimum liquid flowrate and pressure drop operating limits at the highest minimum values established during the performance tests.

(ii) For an electrostatic precipitator, you must establish the minimum voltage and secondary current (or total power input), as defined in §63.7575, as your operating limits during the three-run performance test.

(iii) For a dry scrubber, you must establish the minimum sorbent injection rate, as defined in §63.7575, as your operating limit during the three-run performance test.

(iv) The operating limit for boilers or process heaters with fabric filters that choose to demonstrate continuous compliance through bag leak detection systems is that a bag leak detection system be installed according to the requirements in §63.7525, and that each fabric filter must be operated such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month period.

(d) If you elect to demonstrate compliance with an applicable emission limit through fuel analysis, you must conduct fuel analyses according to §63.7521 and follow the procedures in paragraphs (d)(1) through (5) of this section.

(1) If you burn more than one fuel type, you must determine the fuel mixture you could burn in your boiler or process heater that would result in the maximum emission rates of the pollutants that you elect to demonstrate compliance through fuel analysis.

(2) You must determine the 90th percentile confidence level fuel pollutant concentration of the composite samples analyzed for each fuel type using the one-sided z-statistic test described in Equation 8 of this section.

$$P_{90} = mean + (SD \times t) \qquad \text{(Eq. 8)}$$

Where:

P_{90}= 90th percentile confidence level pollutant concentration, in pounds per million Btu.

mean = Arithmetic average of the fuel pollutant concentration in the fuel samples analyzed according to §63.7521, in units of pounds per million Btu.

SD = Standard deviation of the pollutant concentration in the fuel samples analyzed according to §63.7521, in units of pounds per million Btu.

t = t distribution critical value for 90th percentile (0.1) probability for the appropriate degrees of freedom (number of samples minus one) as obtained from a Distribution Critical Value Table.

(3) To demonstrate compliance with the applicable emission limit for HCl, the HCl emission rate that you calculate for your boiler or process heater using Equation 9 of this section must be less than the applicable emission limit for HCl.

$$HCl = \sum_{i=1}^{n}\left[\left(C_{i90}\right)\left(Q_i\right)\left(1.028\right)\right] \qquad (Eq.\ 9)$$

Where:

HCl = HCl emission rate from the boiler or process heater in units of pounds per million Btu.

C_{i90}= 90th percentile confidence level concentration of chlorine in fuel type, i, in units of pounds per million Btu as calculated according to Equation 8 of this section.

Q_i= Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of “1” for Q_i.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.

1.028 = Molecular weight ratio of HCl to chlorine.

(4) To demonstrate compliance with the applicable emission limit for TSM, the TSM emission rate that you calculate for your boiler or process heater using Equation 10 of this section must be less than the applicable emission limit for TSM.

$$TSM = \sum_{i=1}^{n}\left[\left(M_{i90}\right)\left(Q_i\right)\right] \qquad (Eq.\ 10)$$

Where:

TSM = TSM emission rate from the boiler or process heater in units of pounds per million Btu.

M_{i90}= 90th percentile confidence level concentration of TSM in fuel, i, in units of pounds per million Btu as calculated according to Equation 8 of this section.

Q_i= Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of total selected metals. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of “1” for Q_i.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of TSM.

(5) To demonstrate compliance with the applicable emission limit for mercury, the mercury emission rate that you calculate for your boiler or process heater using Equation 11 of this section must be less than the applicable emission limit for mercury.

$$Mercury = \sum_{i=1}^{n}\left[\left(HG_{i90}\right)\left(Q_i\right)\right] \qquad (Eq.\ 11)$$

Where:

Mercury = Mercury emission rate from the boiler or process heater in units of pounds per million Btu.

HG_{i90}= 90th percentile confidence level concentration of mercury in fuel, i, in units of pounds per million Btu as calculated according to Equation 8 of this section.

Q_i= Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of “1” for Q_i.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest mercury content.

(e) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.7545(e).

Continuous Compliance Requirements

§ 63.7535 How do I monitor and collect data to demonstrate continuous compliance?

(a) You must monitor and collect data according to this section and the site-specific monitoring plan required by §63.7505(d).

(b) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times that the affected source is operating.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system. Boilers and process heaters that have an applicable carbon monoxide work practice standard and are required to install and operate a CEMS, may not use data recorded during periods when the boiler or process heater is operating at less than 50 percent of its rated capacity.

§ 63.7540 How do I demonstrate continuous compliance with the emission limits and work practice standards?

(a) You must demonstrate continuous compliance with each emission limit, operating limit, and work practice standard in Tables 1 through 4 to this subpart that applies to you according to the methods specified in Table 8 to this subpart and paragraphs (a)(1) through (10) of this section.

(1) Following the date on which the initial performance test is completed or is required to be completed under §§63.7 and 63.7510, whichever date comes first, you must not operate above any of the applicable maximum operating limits or below any of the applicable minimum operating limits listed in Tables 2 through 4 to this subpart at all times except during periods of startup, shutdown and malfunction. Operating limits do not apply during performance tests. Operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits.

(2) You must keep records of the type and amount of all fuels burned in each boiler or process heater during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would either result in lower emissions of TSM, HCl, and mercury, than the applicable emission limit for each pollutant (if you demonstrate compliance through fuel analysis), or result in lower fuel input of TSM, chlorine, and mercury than the maximum values calculated during the last performance tests (if you demonstrate compliance through performance testing).

(3) If you demonstrate compliance with an applicable HCl emission limit through fuel analysis and you plan to burn a new type of fuel, you must recalculate the HCl emission rate using Equation 9 of §63.7530 according to paragraphs (a)(3)(i) through (iii) of this section.

(i) You must determine the chlorine concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of chlorine.

(iii) Recalculate the HCl emission rate from your boiler or process heater under these new conditions using Equation 9 of §63.7530. The recalculated HCl emission rate must be less than the applicable emission limit.

(4) If you demonstrate compliance with an applicable HCl emission limit through performance testing and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum chlorine input using Equation 5 of §63.7530. If the results of recalculating the maximum chlorine input using Equation 5 of §63.7530 are higher than the maximum chlorine input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the HCl emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(c).

(5) If you demonstrate compliance with an applicable TSM emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the TSM emission rate using Equation 10 of §63.7530 according to the procedures specified in paragraphs (a)(5)(i) through (iii) of this section.

(i) You must determine the TSM concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of TSM.

(iii) Recalculate the TSM emission rate from your boiler or process heater under these new conditions using Equation 10 of §63.7530. The recalculated TSM emission rate must be less than the applicable emission limit.

(6) If you demonstrate compliance with an applicable TSM emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum TSM input using Equation 6 of §63.7530. If the results of recalculating the maximum total selected metals input using Equation 6 of §63.7530 are higher than the maximum TSM input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the TSM emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(c).

(7) If you demonstrate compliance with an applicable mercury emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the mercury emission rate using Equation 11 of §63.7530 according to the procedures specified in paragraphs (a)(7)(i) through (iii) of this section.

(i) You must determine the mercury concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of mercury.

(iii) Recalculate the mercury emission rate from your boiler or process heater under these new conditions using Equation 11 of §63.7530. The recalculated mercury emission rate must be less than the applicable emission limit.

(8) If you demonstrate compliance with an applicable mercury emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum mercury input using Equation 7 of §63.7530. If the results of recalculating the maximum mercury input using Equation 7 of §63.7530 are higher than the maximum mercury input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the mercury emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(c).

(9) If your unit is controlled with a fabric filter, and you demonstrate continuous compliance using a bag leak detection system, you must initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions as soon as practical, and operate and maintain the fabric filter system such that the alarm does not sound more than 5 percent of the operating time during a 6-month period. You must also keep records of the date, time, and duration of each alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken. You must also record the percent of the operating time during each 6-month period that the alarm sounds. In calculating this operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If you take longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken to initiate corrective action.

(10) If you have an applicable work practice standard for carbon monoxide, and you are required to install a CEMS according to §63.7525(a), then you must meet the requirements in paragraphs (a)(10)(i) through (iii) of this section.

(i) You must continuously monitor carbon monoxide according to §§63.7525(a) and 63.7535.

(ii) Maintain a carbon monoxide emission level below your applicable carbon monoxide work practice standard in Table 1 to this subpart at all times except during periods of startup, shutdown, malfunction, and when your boiler or process heater is operating at less than 50 percent of rated capacity.

(iii) Keep records of carbon monoxide levels according to §63.7555(b).

(b) You must report each instance in which you did not meet each emission limit, operating limit, and work practice standard in Tables 1 through 4 to this subpart that apply to you. You must also report each instance during a startup, shutdown, or malfunction when you did not meet each applicable emission limit, operating limit, and work practice standard. These instances are deviations from the emission limits and work practice standards in this subpart. These deviations must be reported according to the requirements in §63.7550.

(c) [Reserved]

(d) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the EPA Administrator's satisfaction that you were operating in accordance with §63.6(e)(1). The EPA Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

[69 FR 55253, Sept. 13, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 71 FR 70662, Dec. 6, 2006]

§ 63.7541 How do I demonstrate continuous compliance under the emission averaging provision?

(a) Following the compliance date, the owner or operator must demonstrate compliance with this subpart on a continuous basis by meeting the requirements of paragraphs (a)(1) through (5) of this section.

(1) For each calendar month, demonstrate compliance with the average weighted emissions limit for the existing large solid fuel boilers participating in the emissions averaging option as determined in §63.7522(f) and (g);

(2) You must maintain the applicable opacity limit according to paragraphs (a)(2)(i) through (ii) of this section.

(i) For each existing solid fuel boiler participating in the emissions averaging option that is equipped with a dry control system and not vented to a common stack, maintain opacity at or below the applicable limit.

(ii) For each group of boilers participating in the emissions averaging option where each boiler in the group is an existing solid fuel boiler equipped with a dry control system and vented to a common stack that does not receive emissions from affected units from other subcategories or nonaffected units, maintain opacity at or below the applicable limit at the common stack;

(3) For each existing solid fuel boiler participating in the emissions averaging option that is equipped with a wet scrubber, maintain the 3-hour average parameter values at or below the operating limits established during the most recent performance test; and

(4) For each existing solid fuel boiler participating in the emissions averaging option that has an approved alternative operating plan, maintain the 3-hour average parameter values at or below the operating limits established in the most recent performance test.

(5) For each existing large solid fuel boiler participating in the emissions averaging option venting to a common stack configuration containing affected units from other subcategories and/or nonaffected units, maintain the appropriate operating limit for each unit as specified in Tables 2 through 4 to this subpart that applies.

(b) Any instance where the owner or operator fails to comply with the continuous monitoring requirements in paragraphs (a)(1) through (5) of this section, except during periods of startup, shutdown, and malfunction, is a deviation.

[69 FR 55253, Sept. 13, 2004, as amended at 71 FR 70662, Dec. 6, 2006]

Notification, Reports, and Records

§ 63.7545 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8 (e), (f)(4) and (6), and 63.9 (b) through (h) that apply to you by the dates specified.

(b) As specified in §63.9(b)(2), if you startup your affected source before November 12, 2004, you must submit an Initial Notification not later than 120 days after November 12, 2004. The Initial Notification must include the information required in paragraphs (b)(1) and (2) of this section, as applicable.

(1) If your affected source has an annual capacity factor of greater than 10 percent, your Initial Notification must include the information required by §63.9(b)(2).

(2) If your affected source has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent such that the unit is in one of the limited use subcategories (the limited use solid fuel subcategory, the limited use liquid fuel subcategory, or the limited use gaseous fuel subcategory), your Initial Notification must include the information required by §63.9(b)(2) and also a signed statement indicating your affected source has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent.

(c) As specified in §63.9(b)(4) and (b)(5), if you startup your new or reconstructed affected source on or after November 12, 2004, you must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

(d) If you are required to conduct a performance test you must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin.

(e) If you are required to conduct an initial compliance demonstration as specified in §63.7530(a), you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). For each initial compliance demonstration, you must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to §63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (9), as applicable.

(1) A description of the affected source(s) including identification of which subcategory the source is in, the capacity of the source, a description of the add-on controls used on the source description of the fuel(s) burned, and justification for the fuel(s) burned during the performance test.

(2) Summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits.

(3) Identification of whether you are complying with the particulate matter emission limit or the alternative total selected metals emission limit.

(4) Identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis.

(5) Identification of whether you plan to demonstrate compliance by emissions averaging.

(6) A signed certification that you have met all applicable emission limits and work practice standards.

(7) A summary of the carbon monoxide emissions monitoring data and the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable work practice standard in Table 1 to this subpart.

(8) If your new or reconstructed boiler or process heater is in one of the liquid fuel subcategories and burns only liquid fossil fuels other than residual oil either alone or in combination with gaseous fuels, you must submit a signed statement certifying this in your Notification of Compliance Status report.

(9) If you had a deviation from any emission limit or work practice standard, you must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.

§ 63.7550 What reports must I submit and when?

(a) You must submit each report in Table 9 to this subpart that applies to you.

(b) Unless the EPA Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 9 to this subpart and according to the requirements in paragraphs (b)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7495 and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the compliance date that is specified for your source in §63.7495.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.7495.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain the information required in paragraphs (c)(1) through (11) of this section.

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure.

(5) A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable.

(6) A signed statement indicating that you burned no new types of fuel. Or, if you did burn a new type of fuel, you must submit the calculation of chlorine input, using Equation 5 of §63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of HCl emission rate using Equation 9 of §63.7530 that demonstrates that your source is still meeting the emission limit for HCl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of TSM input, using Equation 6 of §63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate using Equation 10 of §63.7530 that demonstrates that your source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of mercury input, using Equation 7 of §63.7530, that demonstrates that your source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 11 of §63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis).

(7) If you wish to burn a new type of fuel and you can not demonstrate compliance with the maximum chlorine input operating limit using Equation 5 of §63.7530, the maximum TSM input operating limit using Equation 6 of §63.7530, or the maximum mercury input operating limit using Equation 7 of §63.7530, you must include in the compliance report a statement indicating the intent to conduct a new performance test within 60 days of starting to burn the new fuel.

(8) The hours of operation for each boiler and process heater that is subject to an emission limit for each calendar month within the semiannual reporting period. This requirement applies only to limited use boilers and process heaters.

(9) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in §63.10(d)(5)(i).

(10) If there are no deviations from any emission limits or operating limits in this subpart that apply to you, and there are no deviations from the requirements for work practice standards in this subpart, a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.

(11) If there were no periods during which the CMSs, including CEMS, COMS, and CPMS, were out of control as specified in §63.8(c)(7), a statement that there were no periods during which the CMSs were out of control during the reporting period.

(d) For each deviation from an emission limit or operating limit in this subpart and for each deviation from the requirements for work practice standards in this subpart that occurs at an affected source where you are not using a CMSs to comply with that emission limit, operating limit, or work practice standard, the compliance report must contain the information in paragraphs (c)(1) through (10) of this section and the information required in paragraphs (d)(1) through (4) of this section. This includes periods of startup, shutdown, and malfunction.

(1) The total operating time of each affected source during the reporting period.

(2) A description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated.

(3) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.

(4) A copy of the test report if the annual performance test showed a deviation from the emission limit for particulate matter or the alternative TSM limit, a deviation from the HCl emission limit, or a deviation from the mercury emission limit.

(e) For each deviation from an emission limitation and operating limit or work practice standard in this subpart occurring at an affected source where you are using a CMS to comply with that emission limit, operating limit, or work practice standard, you must include the information in paragraphs (c) (1) through (10) of this section and the information required in paragraphs (e) (1) through (12) of this section. This includes periods of startup, shutdown, and malfunction and any deviations from your site-specific monitoring plan as required in §63.7505(d).

(1) The date and time that each malfunction started and stopped and description of the nature of the deviation (*i.e.* , what you deviated from).

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out of control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMSs downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

(8) An identification of each parameter that was monitored at the affected source for which there was a deviation, including opacity, carbon monoxide, and operating parameters for wet scrubbers and other control devices.

(9) A brief description of the source for which there was a deviation.

(10) A brief description of each CMS for which there was a deviation.

(11) The date of the latest CMS certification or audit for the system for which there was a deviation.

(12) A description of any changes in CMSs, processes, or controls since the last reporting period for the source for which there was a deviation.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 9 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you operate a new gaseous fuel unit that is subject to the work practice standard specified in Table 1 to this subpart, and you intend to use a fuel other than natural gas or equivalent to fire the affected unit, you must submit a notification of alternative fuel use within 48 hours of the declaration of a period of natural gas curtailment or supply interruption, as defined in §63.7575. The notification must include the information specified in paragraphs (g)(1) through (5) of this section.

(1) Company name and address.

(2) Identification of the affected unit.

(3) Reason you are unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared or the natural gas supply interruption began.

(4) Type of alternative fuel that you intend to use.

(5) Dates when the alternative fuel use is expected to begin and end.

§ 63.7555 What records must I keep?

(a) You must keep records according to paragraphs (a)(1) through (3) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, fuel analyses, or other compliance demonstrations, performance evaluations, and opacity observations as required in §63.10(b)(2)(viii).

(b) For each CEMS, CPMS, and COMS, you must keep records according to paragraphs (b)(1) through (5) of this section.

(1) Records described in §63.10(b)(2) (vi) through (xi).

(2) Monitoring data for continuous opacity monitoring system during a performance evaluation as required in §63.6(h)(7)(i) and (ii).

(3) Previous (*i.e.,* superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(4) Request for alternatives to relative accuracy test for CEMS as required in §63.8(f)(6)(i).

(5) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(c) You must keep the records required in Table 8 to this subpart including records of all monitoring data and calculated averages for applicable operating limits such as opacity, pressure drop, carbon monoxide, and pH to show continuous compliance with each emission limit, operating limit, and work practice standard that applies to you.

(d) For each boiler or process heater subject to an emission limit, you must also keep the records in paragraphs (d)(1) through (5) of this section.

(1) You must keep records of monthly fuel use by each boiler or process heater, including the type(s) of fuel and amount(s) used.

(2) You must keep records of monthly hours of operation by each boiler or process heater. This requirement applies only to limited-use boilers and process heaters.

(3) A copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 5 of §63.7530, that were done to demonstrate continuous compliance with the HCl emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of HCl emission rates, using Equation 9 of §63.7530, that were done to demonstrate compliance with the HCl emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum chlorine fuel input or HCl emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate chlorine fuel input, or HCl emission rate, for each boiler and process heater.

(4) A copy of all calculations and supporting documentation of maximum TSM fuel input, using Equation 6 of §63.7530, that were done to demonstrate continuous compliance with the TSM emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of TSM emission rates, using Equation 10 of §63.7530, that were done to demonstrate compliance with the TSM emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum TSM fuel input or TSM emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate TSM fuel input, or TSM emission rates, for each boiler and process heater.

(5) A copy of all calculations and supporting documentation of maximum mercury fuel input, using Equation 7 of §63.7530, that were done to demonstrate continuous compliance with the mercury emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of mercury emission rates, using Equation 11 of §63.7530, that were done to demonstrate compliance with the mercury emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum mercury fuel input or mercury emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate mercury fuel input, or mercury emission rates, for each boiler and process heater.

(e) If your boiler or process heater is subject to an emission limit or work practice standard in Table 1 to this subpart and has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent such that the unit is in one of the limited use subcategories, you must keep the records in paragraphs (e)(1) and (2) of this section.

(1) A copy of the federally enforceable permit that limits the annual capacity factor of the source to less than or equal to 10 percent.

(2) Fuel use records for the days the boiler or process heater was operating.

§ 63.7560 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records off site for the remaining 3 years.

Other Requirements and Information

§ 63.7565 What parts of the General Provisions apply to me?

Table 10 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§ 63.7570 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities listed in paragraphs (b)(1) through (5) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency, however, the U.S. EPA retains oversight of this subpart and can take enforcement actions, as appropriate.

(1) Approval of alternatives to the non-opacity emission limits and work practice standards in §63.7500(a) and (b) under §63.6(g).

(2) Approval of alternative opacity emission limits in §63.7500(a) under §63.6(h)(9).

(3) Approval of major change to test methods in Table 5 to this subpart under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(4) Approval of major change to monitoring under §63.8(f) and as defined in §63.90.

(5) Approval of major change to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

§ 63.7575 What definitions apply to this subpart?

Terms used in this subpart are defined in the CAA, in §63.2 (the General Provisions), and in this section as follows:

Annual capacity factor means the ratio between the actual heat input to a boiler or process heater from the fuels burned during a calendar year, and the potential heat input to the boiler or process heater had it been operated for 8,760 hours during a year at the maximum steady state design heat input capacity.

Bag leak detection system means an instrument that is capable of monitoring particulate matter loadings in the exhaust of a fabric filter (*i.e.* , baghouse) in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on electrodynamic, triboelectric, light scattering, light transmittance, or other principle to monitor relative particulate matter loadings.

Biomass fuel means unadulterated wood as defined in this subpart, wood residue, and wood products (*e.g.* , trees, tree stumps, tree limbs, bark, lumber, sawdust, sanderdust, chips, scraps, slabs, millings, and shavings); animal litter; vegetative agricultural and silvicultural materials, such as logging residues (slash), nut and grain hulls and chaff (*e.g.* , almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds.

Blast furnace gas fuel-fired boiler or process heater means an industrial/commercial/institutional boiler or process heater that receives 90 percent or more of its total heat input (based on an annual average) from blast furnace gas.

Boiler means an enclosed device using controlled flame combustion and having the primary purpose of recovering thermal energy in the form of steam or hot water. Waste heat boilers are excluded from this definition.

Coal means all solid fuels classifiable as anthracite, bituminous, sub-bituminous, or lignite by the American Society for Testing and Materials in ASTM D388–991.[1] , “Standard Specification for Classification of Coals by Rank[1] ” (incorporated by reference, see §63.14(b)), coal refuse, and petroleum coke. Synthetic fuels derived from coal for the purpose of creating useful heat including but not limited to, solvent-refined coal, coal-oil mixtures, and coal-water mixtures, for the purposes of this subpart. Coal derived gases are excluded from this definition.

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 (6,000 Btu per pound) on a dry basis.

Commercial/institutional boiler means a boiler used in commercial establishments or institutional establishments such as medical centers, research centers, institutions of higher education, hotels, and laundries to provide electricity, steam, and/or hot water.

Common Stack means the exhaust of emissions from two or more affected units through a single flue.

Construction/demolition material means waste building material that result from the construction or demolition operations on houses and commercial and industrial buildings.

Deviation. (1) Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(i) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard;

(ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(iii) Fails to meet any emission limit, operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless or whether or not such failure is permitted by this subpart.

(2) A deviation is not always a violation. The determination of whether a deviation constitutes a violation of the standard is up to the discretion of the entity responsible for enforcement of the standards.

Distillate oil means fuel oils, including recycled oils, that comply with the specifications for fuel oil numbers 1 and 2, as defined by the American Society for Testing and Materials in ASTM D396–02a, “Standard Specifications for Fuel Oils[1] ” (incorporated by reference, see §63.14(b)).

Dry scrubber means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gas in the exhaust stream forming a dry powder material. Sorbent injection systems in fluidized bed boilers and process heaters are included in this definition.

Electric utility steam generating unit means a fossil fuel-fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A fossil fuel-fired unit that cogenerates steam and electricity and supplies more than one-third of its potential electric output capacity and more than 25 megawatts electrical output to any utility power distribution system for sale is considered an electric utility steam generating unit.

Electrostatic precipitator means an add-on air pollution control device used to capture particulate matter by charging the particles using an electrostatic field, collecting the particles using a grounded collecting surface, and transporting the particles into a hopper.

Equivalent means the following only as this term is used in Table 6 to subpart DDDDD:

(1) An equivalent sample collection procedure means a published voluntary consensus standard or practice (VCS) or EPA method that includes collection of a minimum of three composite fuel samples, with each composite consisting of a minimum of three increments collected at approximately equal intervals over the test period.

(2) An equivalent sample compositing procedure means a published VCS or EPA method to systematically mix and obtain a representative subsample (part) of the composite sample.

(3) An equivalent sample preparation procedure means a published VCS or EPA method that: Clearly states that the standard, practice or method is appropriate for the pollutant and the fuel matrix; or is cited as an appropriate sample preparation standard, practice or method for the pollutant in the chosen VCS or EPA determinative or analytical method.

(4) An equivalent procedure for determining heat content means a published VCS or EPA method to obtain gross calorific (or higher heating) value.

(5) An equivalent procedure for determining fuel moisture content means a published VCS or EPA method to obtain moisture content. If the sample analysis plan calls for determining metals (especially the mercury, selenium, or arsenic) using an aliquot of the dried sample, then the drying temperature must be modified to prevent vaporizing these metals. On the other hand, if metals analysis is done on an “as received” basis, a separate aliquot can be dried to determine moisture content and the metals concentration mathematically adjusted to a dry basis.

(6) An equivalent pollutant (mercury, TSM, or total chlorine) determinative or analytical procedure means a published VCS or EPA method that clearly states that the standard, practice, or method is appropriate for the pollutant and the fuel matrix and has a published detection limit equal or lower than the methods listed in Table 6 to subpart DDDDD for the same purpose.

Fabric filter means an add-on air pollution control device used to capture particulate matter by filtering gas streams through filter media, also known as a baghouse.

Federally enforceable means all limitations and conditions that are enforceable by the EPA 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.

Firetube boiler means a boiler that utilizes a containment shell that encloses firetubes (tubes in a boiler having water on the outside and carrying the hot gases of combustion inside), and allows the water to vaporize and steam to separate. Hybrid boilers that have been registered/certified by the National Board of Boiler and Pressure Vessel Inspectors and/or the State as firetube boilers as indicated by “Form P–2” (Manufacturers' Data Report for All Types of Boilers Except Watertube and Electric, As Required by the Provisions of the ASME Code Rules, Section I), are considered to be firetube boilers for the purpose of this subpart.

Fuel type means each category of fuels that share a common name or classification. Examples include, but are not limited to, bituminous coal, subbituminous coal, lignite, anthracite, biomass, construction/demolition material, salt water laden wood, creosote treated wood, tires, residual oil. Individual fuel types received from different suppliers are not considered new fuel types except for construction/demolition material. Contraband, prohibited goods, or retired U.S. flags, burned at the request of a government agency, are not considered a fuel type for the purpose of this subpart.

Gaseous fuel includes, but is not limited to, natural gas, process gas, landfill gas, coal derived gas, refinery gas, and biogas. Blast furnace gas is exempted from this definition.

Heat input means heat derived from combustion of fuel in a boiler or process heater and does not include the heat input from preheated combustion air, recirculated flue gases, or exhaust gases from other sources such as gas turbines, internal combustion engines, kilns, etc.

Hot water heater means a closed vessel with a capacity of no more than 120 U.S. gallons in which water is heated by combustion of gaseous or liquid fuel and is withdrawn for use external to the vessel at pressures not exceeding 160 psig, including the apparatus by which the heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 210 °F (99 °C).

Industrial boiler means a boiler used in manufacturing, processing, mining, and refining or any other industry to provide steam, hot water, and/or electricity.

Large gaseous fuel subcategory includes any watertube boiler or process heater that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or for periodic testing of liquid fuel, has a rated capacity of greater than 10 MMBtu per hour heat input, and does not have a federally enforceable annual average capacity factor of equal to or less than 10 percent. Periodic testing of liquid fuel is not to exceed a combined total of 48 hours during any calendar year.

Large liquid fuel subcategory includes any watertube boiler or process heater that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and does not have a federally enforceable annual average capacity factor of equal to or less than 10 percent. Large gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment, gas supply emergencies or for periodic testing of liquid fuel not to exceed a combined total of 48 hours during any calendar year are not included in this definition.

Large solid fuel subcategory includes any watertube boiler or process heater that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and does not have a federally enforceable annual average capacity factor of equal to or less than 10 percent.

Limited use gaseous fuel subcategory includes any watertube boiler or process heater that burns gaseous fuels not combined with any liquid or solid fuels, burns liquid fuel only during periods of gas curtailment or gas supply emergencies, has a rated capacity of greater than 10 MMBtu per hour heat input, and has a federally enforceable annual average capacity factor of equal to or less than 10 percent.

Limited use liquid fuel subcategory includes any watertube boiler or process heater that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and has a federally enforceable annual average capacity factor of equal to or less than 10 percent. Limited use gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply emergencies are not included in this definition.

Limited use solid fuel subcategory includes any watertube boiler or process heater that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and has a federally enforceable annual average capacity factor of equal to or less than 10 percent.

Liquid fossil fuel means petroleum, distillate oil, residual oil and any form of liquid fuel derived from such material.

Liquid fuel includes, but is not limited to, distillate oil, residual oil, waste oil, and process liquids.

Minimum pressure drop means 90 percent of the lowest test-run average pressure drop measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

Minimum scrubber effluent pH means 90 percent of the lowest test-run average effluent pH measured at the outlet of the wet scrubber according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable hydrogen chloride emission limit.

Minimum scrubber flow rate means 90 percent of the lowest test-run average flow rate measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

Minimum sorbent flow rate means 90 percent of the lowest test-run average sorbent (or activated carbon) flow rate measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limits.

Minimum voltage or amperage means 90 percent of the lowest test-run average voltage or amperage to the electrostatic precipitator measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limits.

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) Liquid petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835–03a, “Standard Specification for Liquid Petroleum Gases” (incorporated by reference, see §63.14(b)).

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Particulate matter means any finely divided solid or liquid material, other than uncombined water, as measured by the test methods specified under this subpart, or an alternative method.

Period of natural gas curtailment or supply interruption means a period of time during which the supply of natural gas to an affected facility is halted for reasons beyond the control of the facility. An increase in the cost or unit price of natural gas does not constitute a period of natural gas curtailment or supply interruption.

Process heater means an enclosed device using controlled flame, that is not a boiler, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not directly come into contact with process materials. Process heaters do not include units used for comfort heat or space heat, food preparation for on-site consumption, or autoclaves.

Residual oil means crude oil, and all fuel oil numbers 4, 5 and 6, as defined by the American Society for Testing and Materials in ASTM D396–02a, “Standard Specifications for Fuel Oils[1] ” (incorporated by reference, see §63.14(b)).

Responsible official means responsible official as defined in 40 CFR 70.2.

Small gaseous fuel subcategory includes any size of firetube boiler and any other boiler or process heater with a rated capacity of less than or equal to 10 MMBtu per hour heat input that burn gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or for periodic testing of liquid fuel. Periodic testing is not to exceed a combined total of 48 hours during any calendar year.

Small liquid fuel subcategory includes any size of firetube boiler and any other boiler or process with a rated capacity of less than or equal to 10 MMBtu per hour heat input that do not burn any solid fuel and burn any liquid fuel either alone or in combination with gaseous fuels. Small gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment, gas supply emergencies or for periodic testing of liquid fuel not to exceed a combined total of 48 hours during any calendar year are not included in this definition.

Small solid fuel subcategory includes any firetube boiler that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels, and any other boiler or process heater that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels and has a rated capacity of less than or equal to 10 MMBtu per hour heat input.

Solid fuel includes, but is not limited to, coal, wood, biomass, tires, plastics, and other nonfossil solid materials.

Temporary boiler means any gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved from one location to another. A temporary boiler that remains at a location for more than 180 consecutive days is no longer considered to be a temporary boiler. Any temporary boiler that replaces a temporary boiler at a location and is intended to perform the same or similar function will be included in calculating the consecutive time period.

Total selected metals means the combination of the following metallic HAP: arsenic, beryllium, cadmium, chromium, lead, manganese, nickel and selenium.

Unadulterated wood means wood or wood products that have not been painted, pigment-stained, or pressure treated with compounds such as chromate copper arsenate, pentachlorophenol, and creosote. Plywood, particle board, oriented strand board, and other types of wood products bound by glues and resins are included in this definition.

Voluntary Consensus Standards or VCS mean technical standards (*e.g.* , materials specifications, test methods, sampling procedures, business practices) developed or adopted by one or more voluntary consensus bodies. EPA/OAQPS has by precedent only used VCS that are written in English. Examples of VCS bodies are: American Society of Testing and Materials (ASTM), American Society of Mechanical Engineers (ASME), International Standards Organization (ISO), Standards Australia (AS), British Standards (BS), Canadian Standards (CSA), European Standard (EN or CEN) and German Engineering Standards (VDI). The types of standards that are not considered VCS are standards developed by: the U.S. states, *e.g.* , California (CARB) and Texas (TCEQ); industry groups, such as American Petroleum Institute (API), Gas Processors Association (GPA), and Gas Research Institute (GRI); and other branches of the U.S. government, *e.g.* Department of Defense (DOD) and Department of Transportation (DOT). This does not preclude EPA from using standards developed by groups that are not VCS bodies within their rule. When this occurs, EPA has done searches and reviews for VCS equivalent to these non-EPA methods.

Waste heat boiler means a device that recovers normally unused energy and converts it to usable heat. Waste heat boilers incorporating duct or supplemental burners that are designed to supply 50 percent or more of the total rated heat input capacity of the waste heat boiler are not considered waste heat boilers, but are considered boilers. Waste heat boilers are also referred to as heat recovery steam generators.

Watertube boiler means a boiler that incorporates a steam drum with tubes connected to the drum to separate steam from water.

Wet scrubber means any add-on air pollution control device that mixes an aqueous stream or slurry with the exhaust gases from a boiler or process heater to control emissions of particulate matter and/or to absorb and neutralize acid gases, such as hydrogen chloride.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

[69 FR 55253, Sept. 13, 2004, as amended at 71 FR 70662, Dec. 6, 2006]

Table 1 to Subpart DDDDD of Part 63—Emission Limits and Work Practice Standards

As stated in §63.7500, you must comply with the following applicable emission limits and work practice standards:

If your boiler or process heater is in this subcategory . . .	For the following pollutants . . .	You must meet the following emission limits and work practice standards . . .
1. New or reconstructed large solid fuel	a. Particulate Matter (or Total Selected Metals)	0.025 lb per MMBtu of heat input; or (0.0003 lb per MMBtu of heat input).
	b. Hydrogen Chloride	0.02 lb per MMBtu of heat input.
	c. Mercury	0.000003 lb per MMBtu of heat input.
	d. Carbon Monoxide	400 ppm by volume on a dry basis corrected to 7 percent oxygen (30-day rolling average for units 100 MMBtu/hr or greater, 3-run average for units less than 100 MMBtu/hr).
2. New or reconstructed limited use solid fuel	a. Particulate Matter (or Total Selected Metals)	0.025 lb per MMBtu of heat input; or (0.0003 lb per MMBtu of heat input).
	b. Hydrogen Chloride	0.02 lb per MMBtu of heat input.
	c. Mercury	0.000003 lb per MMBtu of heat input.
	d. Carbon Monoxide	400 ppm by volume on a dry basis corrected to 7 percent oxygen (3-run average).
3. New or reconstructed small solid fuel	a. Particulate Matter (or Total Selected Metals)	0.025 lb per MMBtu of heat input; or (0.0003 lb per MMBtu of heat input).
	b. Hydrogen Chloride	0.02 lb per MMBtu of heat input.
	c. Mercury	0.000003 lb per MMBtu of heat input.
4. New reconstructed large liquid fuel	a. Particulate Matter	0.03 lb per MMBtu of heat input.
	b. Hydrogen Chloride	0.0005 lb per MMBtu of heat input.
	c. Carbon Monoxide	400 ppm by volume on a dry basis corrected to 3 percent oxygen (30-day rolling average for units 100 MMBtu/hr or greater, 3-run average for units less than 100 MMBtu/hr).
5. New or reconstructed limited use liquid fuel	a. Particulate Matter	0.03 lb per MMBtu of heat input.
	b. Hydrogen Chloride	0.0009 lb per MMBtu of heat input.

If your boiler or process heater is in this subcategory . . .	For the following pollutants . . .	You must meet the following emission limits and work practice standards . . .
	c. Carbon Monoxide	400 ppm by volume on a dry basis liquid corrected to 3 percent oxygen (3-run average).
6. New or reconstructed small liquid fuel	a. Particulate Matter	0.03 lb per MMBtu of heat input.
	b. Hydrogen Chloride	0.0009 lb per MMBtu of heat input.
7. New reconstructed large gaseous fuel	Carbon Monoxide	400 ppm by volume on a dry basis corrected to 3 percent oxygen (30-day rolling average for units 100 MMBtu/hr or greater, 3-run average for units less than 100 MMBtu/hr).
8. New or reconstructed limited use gaseous fuel	Carbon Monoxide	400 ppm by volume on a dry basis corrected to 3 percent oxygen (3-run average).
9. Existing large solid fuel	a. Particulate Matter (or Total Selected Metals)	0.07 lb per MMBtu of heat input; or (0.001 lb per MMBtu of heat input).
	b. Hydrogen Chloride	0.09 lb per MMBtu of heat input.
	c. Mercury	0.000009 lb per MMBtu of heat input.
10. Existing limited use solid fuel	Particulate Matter (or Total Selected Metals)	0.21 lb per MMBtu of heat input; or (0.004 lb per MMBtu of heat input).

Table 2 to Subpart DDDDD of Part 63—Operating Limits for Boilers and Process Heaters With Particulate Matter Emission Limits

As stated in §63.7500, you must comply with the applicable operating limits:

If you demonstrate compliance with applicable particulate matter emission limits using . . .	You must meet these operating limits . . .
1. Wet scrubber control	a. Maintain the minimum pressure drop and liquid flow-rate at or above the operating levels established during the performance test according to §63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for particulate matter.
2. Fabric filter control	a. Install and operate a bag leak detection system according to §63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period; or

If you demonstrate compliance with applicable particulate matter emission limits using . . .	You must meet these operating limits . . .
	b. This option is for boilers and process heaters that operate dry control systems. Existing boilers and process heaters must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent. New boilers and process heaters must maintain opacity to less than or equal to 10 percent opacity (1-hour block average).
3. Electrostatic precipitator control	a. This option is for boilers and process heaters that operate dry control systems. Existing boilers and process heaters must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent. New boilers and process heaters must maintain opacity to less than or equal to 10 percent opacity (1-hour block average); or
	b. This option is only for boilers and process heaters that operate additional wet control systems. Maintain the minimum voltage and secondary current or total power input of the electrostatic precipitator at or above the operating limits established during the performance test according to §63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for particulate matter.
4. Any other control type	This option is for boilers and process heaters that operate dry control systems. Existing boilers and process heaters must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent. New boilers and process heaters must maintain opacity to less than or equal to 10 percent opacity (1-hour block average).

Table 3 to Subpart DDDDD of Part 63—Operating Limits for Boilers and Process Heaters With Mercury Emission Limits and Boilers and Process Heaters That Choose To Comply With the Alternative Total Selected Metals Emission Limits

As stated in §63.7500, you must comply with the applicable operating limits:

If you demonstrate compliance with applicable mercury and/or total selected metals emission limits using . . .	You must meet these operating limits . . .
1. Wet scrubber control	Maintain the minimum pressure drop and liquid flow-rate at or above the operating levels established during the performance test according to §63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limits for mercury and/or total selected metals.
2. Fabric filter control	a. Install and operate a bag leak detection system according to §63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month period; or

If you demonstrate compliance with applicable mercury and/or total selected metals emission limits using . . .	You must meet these operating limits . . .
	b. This option is for boilers and process heaters that operate dry control systems. Existing sources must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent. New sources must maintain opacity to less than or equal to 10 percent opacity (1-hour block average).
3. Electrostatic precipitator control	a. This option is for boilers and process heaters that operate dry control systems. Existing sources must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent. New sources must maintain opacity to less than or equal to 10 percent opacity (1-hour block average); or
	b. This option is only for boilers and process heaters that operate additional wet control systems. Maintain the minimum voltage and secondary current or total power input of the electrostatic precipitator at or above the operating limits established during the performance test according to §63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limits for mercury and/or total selected metals.
4. Dry scrubber or carbon injection control	Maintain the minimum sorbent or carbon injection rate at or above the operating levels established during the performance test according to §63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for mercury.
5. Any other control type	This option is only for boilers and process heaters that operate dry control systems. Existing sources must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent. New sources must maintain opacity to less than or equal to 10 percent opacity (1-hour block average).
6. Fuel analysis	Maintain the fuel type or fuel mixture such that the mercury and/or total selected metals emission rates calculated according to §63.7530(d)(4) and/or (5) is less than the applicable emission limits for mercury and/or total selected metals.

Table 4 to Subpart DDDDD of Part 63—Operating Limits for Boilers and Process Heaters With Hydrogen Chloride Emission Limits

As stated in §63.7500, you must comply with the following applicable operating limits:

If you demonstrate compliance with applicable hydrogen chloride emission limits using . . .	You must meet these operating limits . . .
1. Wet scrubber control	Maintain the minimum scrubber effluent pH, pressure drop, and liquid flow-rate at or above the operating levels established during the performance test according to §63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for hydrogen chloride.
2. Dry scrubber control	Maintain the minimum sorbent injection rate at or above the operating levels established during the performance test according to §63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for hydrogen chloride.
3. Fuel analysis	Maintain the fuel type or fuel mixture such that the hydrogen chloride emission rate calculated according to §63.7530(d)(3) is less than the applicable emission limit for hydrogen chloride.

Table 5 to Subpart DDDDD of Part 63—Performance Testing Requirements

As stated in §63.7520, you must comply with the following requirements for performance test for existing, new or reconstructed affected sources:

To conduct a performance test for the following pollutant . . .	You must . . .	Using . . .
1. Particulate Matter	a. Select sampling ports location and the number of traverse points	Method 1 in appendix A to part 60 of this chapter.
	b. Determine velocity and volumetric flow-rate of the stack gas	Method 2, 2F, or 2G in appendix A to part 60 of this chapter.
	c. Determine oxygen and carbon dioxide concentrations of the stack gas	Method 3A or 3B in appendix A to part 60 of this chapter, or ASME PTC 19, Part 10 (1981) (IBR, see §63.14(i)).
	d. Measure the moisture content of the stack gas	Method 4 in appendix A to part 60 of this chapter.
	e. Measure the particulate matter emission concentration	Method 5 or 17 (positive pressure fabric filters must use Method 5D) in appendix A to part 60 of this chapter.
	f. Convert emissions concentration to lb per MMBtu emission rates	Method 19 F-factor methodology in appendix A to part 60 of this chapter.

To conduct a performance test for the following pollutant . . .	You must . . .	Using . . .
2. Total selected metals	a. Select sampling ports location and the number of traverse points	Method 1 in appendix A to part 60 of this chapter.
	b. Determine velocity and volumetric flow-rate of the stack gas	Method 2, 2F, or 2G in appendix A to part 60 of this chapter.
	c. Determine oxygen and carbon dioxide concentrations of the stack gas	Method 3A or 3B in appendix A to part 60 of this chapter, or ASME PTC 19, Part 10 (1981) (IBR, see §63.14(i)).
	d. Measure the moisture content of the stack gas	Method 4 in appendix A to part 60 of this chapter.
	e. Measure the total selected metals emission concentration	Method 29 in appendix A to part 60 of this chapter.
	f. Convert emissions concentration to lb per MMBtu emission rates	Method 19 F-factor methodology in appendix A to part 60 of this chapter.
3. Hydrogen chloride	a. Select sampling ports location and the number of traverse points	Method 1 in appendix A to part 60 of this chapter.
	b. Determine velocity and volumetric flow-rate of the stack gas	Method 2, 2F, or 2G in appendix A to part 60 of this chapter.
	c. Determine oxygen and carbon dioxide concentrations of the stack gas	Method 3A or 3B in appendix A to part 60 of this chapter, or ASME PTC 19, Part 10 (1981) (IBR, see §63.14(i)).
	d. Measure the moisture content of the stack gas	Method 4 in appendix A to part 60 of this chapter.
	e. Measure the hydrogen chloride emission concentration	Method 26 or 26A in appendix A to part 60 of this chapter.
	f. Convert emissions concentration to lb per MMBtu emission rates	Method 19 F-factor methodology in appendix A to part 60 of this chapter.
4. Mercury	a. Select sampling ports location and the number of traverse points	Method 1 in appendix A to part 60 of this chapter.
	b. Determine velocity and volumetric flow-rate of the stack gas	Method 2, 2F, or 2G in appendix A to part 60 of this chapter.

To conduct a performance test for the following pollutant . . .	You must . . .	Using . . .
	c. Determine oxygen and carbon dioxide concentrations of the stack gas	Method 3A or 3B in appendix A to part 60 of this chapter, or ASME PTC 19, Part 10 (1981) (IBR, see §62.14(i)).
	d. Measure the moisture content of the stack gas	Method 4 in appendix A to part 60 of this chapter.
	e. Measure the mercury emission concentration	Method 29 in appendix A to part 60 of this chapter or Method 101A in appendix B to part 61 of this chapter or ASTM Method D6784–02 (IBR, see §63.14(b)).
	f. Convert emissions concentration to lb per MMBtu emission rates	Method 19 F-factor methodology in appendix A to part 60 of this chapter.
5. Carbon Monoxide	a. Select the sampling ports location and the number of traverse points	Method 1 in appendix A to part 60 of this chapter.
	b. Determine oxygen and carbon dioxide concentrations of the stack gas	Method 3A or 3B in appendix A to part 60 of this chapter, or ASTM D6522–00 (IBR, see §63.14(b)), or ASME PTC 19, Part 10 (1981) (IBR, see §63.14(i)).
	c. Measure the moisture content of the stack gas	Method 4 in appendix A to part 60 of this chapter.
	d. Measure the carbon monoxide emission concentration	Method 10, 10A, or 10B in appendix A to part 60 of this chapter, or ASTM D6522–00 (IBR, see §63.14(b)) when the fuel is natural gas.

Table 6 to Subpart DDDDD of Part 63—Fuel Analysis Requirements

As stated in §63.7521, you must comply with the following requirements for fuel analysis testing for existing, new or reconstructed affected sources. However, equivalent methods may be used in lieu of the prescribed methods at the discretion of the source owner or operator:

To conduct a fuel analysis for the following pollutant * * *	You must * * *	Using * * *
1. Mercury * * *	a. Collect fuel samples * * *	Procedure in §63.7521(c) or ASTM D2234–D2234M–03(for coal) (IBR, see §63.14(b)) or ASTM D6323–98 (2003) (for biomass) (IBR, See §63.14(b)) or equivalent.
	b. Composite fuel samples * * *	Procedure in §63.7521(d) or equivalent.

To conduct a fuel analysis for the following pollutant * * *	You must * * *	Using * * *
	c. Prepare composited fuel samples * * *	SW–846–3050B (for solid samples) or SW–846–3020A (for liquid samples) or ASTM D2013–04 (for coal) (IBR, see §63.14(b)) or ASTM D5198–92 (2003) (for biomass) (IBR, see §63.14(b)) or equivalent.
	d. Determine heat content of the fuel type * * *	ASTM D5865–04 (for coal) (IBR, see §63.24(b)) or ASTM E711–87 (for biomass) (IBR, see §63.14(b)) or equivalent.
	e. Determine moisture content of the fuel type * * *	ASTM D3173–03 (IBR, see §63.14(b)) or ASTM E871–82 (1998) (IBR, see §63.14(b)) or equivalent.
	f. Measure mercury concentration in fuel sample * * *	ASTM D6722–01 (for coal) (IBR, see §6314(b)) or SW–846–7471A (for solid samples) or SW–846–7470A (for liquid samples or equivalent.
	g. Convert concentration into units of pounds of pollutant per MMBtu of heat content.	
2. Total Selected metals * * *	a. Collect fuel samples * * *	Procedure in §63.7521(c) or ASTM D2234–D2234M–03(for coal) (IBR, see §63.14(b)) or ASTM D6323–98 (2003) (for biomass) (IBR, see §63.14(b)) or equivalent.
	b. Composite fuel samples * * *	Procedure in §63.7521(d) or equivalent.
	c. Prepare composited fuel samples * * *	SW–846–3050B (for solid samples) or SW–846–3020A (for liquid samples) or ASTM D2013–04 (for coal) (IBR, see §63.14(b)) or ASTM D5198–92 (2003) (for biomass (IBR, see §63.14(b)) or equivalent.
	d. Determine heat content of the fuel type * * *	ASTM D5865–04 (for coal) (IBR, see §63.14(b)) or ASTM E711–87 (for biomass) (IBR, see §63.14(b)) or equivalent.
	e. Determine moisture content of the fuel type * * *	ASTM D3173–03 (IBR, see §63.14(b)) or ASTM E871–82 (IBR, see §63.14(b)) or equivalent.
	f. Measure total selected metals concentration in fuel sample * * *	SW–846–6010B or ASTM D6357–04 (for arsenic, beryllium, cadmium, chromium, lead, manganese, and nickel for all solid fuels) and ASTM D4606–03 (for selenium in coal) (IBR, see §63.14(b)) or ASTM E885–88 (1996) for biomass) (IBR, see §63.14(b)) or equivalent.
	g. Convert concentrations into units of pounds of pollutant per MMBtu of heat content.	

To conduct a fuel analysis for the following pollutant * * *	You must * * *	Using * * *
3. Hydrogen Chloride * * *	a. Collect fuel samples * * *	Procedure in §63.7521(c) or ASTM D2234–D2234M–03(for coal) (IBR, see §63.14(b)) or ASTM D6323–98 (2003) (for biomass) (IBR, see §63.14(b)) or equivalent.
	b. Composite fuel samples * * *	Procedure in §63.7521(d) or equivalent.
	c. Prepare composited fuel samples * * *	SW–846–3050B (for solid samples) or SW–846–3020A (for liquid samples) or ASTM D2013–04 (for coal) (IBR, see §63.14(b)) or ASTM D5198–92 (2003) (for biomass) (IBR, see §63.14(b)) or equivalent.
	d. Determine heat content of the fuel type * * *	ASTM D5865–04 (for coal) (IBR, see §63.14(b)) or ASTM E711–87 (1996) (for biomass) (IBR, see §63.14(b)) or equivalent.
	e. Determine moisture content of the fuel type * * *	ASTM D3173–03 (IBR, see §63.14(b)) or ASTM E871–82 (1998) or equivalent.
	f. Measure chlorine concentration in fuel sample * * *	SW–846–9250 or ASTM D6721–01 (for coal) or ASTM E776–87 (1996) (for biomass) (IBR, see §63.14(b)) or equivalent.
	g. Convert concentrations into units of pounds of pollutant per MMBtu of heat content.	

[71 FR 70663, Dec. 6, 2006]

Table 7 to Subpart DDDDD of Part 63—Establishing Operating Limits

As stated in §63.7520, you must comply with the following requirements for establishing operating limits:

If you have an applicable emission limit for . . .	And your operating limits are based on . . .	You must . . .	Using . . .	According to the following requirements
1. Particulate matter, mercury, or total selected metals	a. Wet scrubber operating parameters	i. Establish a site-specific minimum pressure drop and minimum flow rate operating limit according to §63.7530(c)	(1) Data from the pressure drop and liquid flow rate monitors and the particulate matter, mercury, or total selected metals performance test	(a) You must collect pressure drop and liquid flow-rate data every 15 minutes during the entire period of the performance tests;

If you have an applicable emission limit for . . .	And your operating limits are based on . . .	You must . . .	Using . . .	According to the following requirements
				(b) Determine the average pressure drop and liquid flow-rate for each individual test run in the three-run performance test by computing the average of all the 15-minute readings taken during each test run.
	b. Electrostatic precipitator operating parameters (option only for units with additional wet scrubber control)	i. Establish a site-specific minimum voltage and secondary current or total power input according to §63.7530(c)	(1) Data from the pressure drop and liquid flow rate monitors and the particulate matter, mercury, or total selected metals performance test	(a) You must collect voltage and secondary current or total power input data every 15 minutes during the entire period of the performance tests;
				(b) Determine the average voltage and secondary current or total power input for each individual test run in the three-run performance test by computing the average of all the 15-minute readings taken during each test run.
2. Hydrogen Chloride	a. Wet scrubber operating parameters	i. Establish a site-specific minimum pressure drop and minimum flow rate operating limit according to §63.7530(c)	(1) Data from the pH, pressure drop, and liquid flow-rate monitors and the hydrogen chloride performance test	(a) You must collect pH, pressure drop, and liquid flow-rate data every 15 minutes during the entire period of the performance tests;
				(b) Determine the average pH, pressure drop, and liquid flow-rate for each individual test run in the three-run performance test by computing the average of all the 15-minute readings taken during each test run.
	b. Dry scrubber operating parameters	i. Establish a site-specific minimum sorbent injection rate operating limit according to §63.7530(c)	(1) Data from the sorbent injection rate monitors and hydrogen chloride performance test	(a) You must collect sorbent injection rate data every 15 minutes during the entire period of the performance tests;

If you have an applicable emission limit for . . .	And your operating limits are based on . . .	You must . . .	Using . . .	According to the following requirements
				(b) Determine the average sorbent injection rate for each individual test run in the three-run performance test by computing the average of all the 15-minute readings taken during each test run.

Table 8 to Subpart DDDDD of Part 63—Demonstrating Continuous Compliance

As stated in §63.7540, you must show continuous compliance with the emission limitations for affected sources according to the following:

If you must meet the following operating limits or work practice standards . . .	You must demonstrate continuous compliance by . . .
1. Opacity	a. Collecting the opacity monitoring system data according to §§63.7525(b) and 63.7535; and
	b. Reducing the opacity monitoring data to 6-minute averages; and
	c. Maintaining opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent for existing sources; or maintaining opacity to less than or equal to 10 percent (1-hour block average) for new sources.
2. Fabric Filter Bag Leak Detection Operation	Installing and operating a bag leak detection system according to §63.7525 and operating the fabric filter such that the requirements in §63.7540(a)(9) are met.
3. Wet Scrubber Pressure Drop and Liquid Flow-rate	a. Collecting the pressure drop and liquid flow rate monitoring system data according to §§63.7525 and 63.7535; and
	b. Reducing the data to 3-hour block averages; and
	c. Maintaining the 3-hour average pressure drop and liquid flow-rate at or above the operating limits established during the performance test according to §63.7530(c).
4. Wet Scrubber pH	a. Collecting the pH monitoring system data according to §§63.7525 and 63.7535; and
	b. Reducing the data to 3-hour block averages; and
	c. Maintaining the 3-hour average pH at or above the operating limit established during the performance test according to §63.7530(c).
5. Dry Scrubber Sorbent or Carbon Injection Rate	a. Collecting the sorbent or carbon injection rate monitoring system data for the dry scrubber according to §§63.7525 and 63.7535; and
	b. Reducing the data to 3-hour block averages; and

If you must meet the following operating limits or work practice standards . . .	You must demonstrate continuous compliance by . . .
	c. Maintaining the 3-hour average sorbent or carbon injection rate at or above the operating limit established during the performance test according to §§63.7530(c).
6. Electrostatic Precipitator Secondary Current and Voltage or Total Power Input	a. Collecting the secondary current and voltage or total power input monitoring system data for the electrostatic precipitator according to §§63.7525 and 63.7535; and
	b. Reducing the data to 3-hour block averages; and
	c. Maintaining the 3-hour average secondary current and voltage or total power input at or above the operating limits established during the performance test according to §§63.7530(c).
7. Fuel Pollutant Content	a. Only burning the fuel types and fuel mixtures used to demonstrate compliance with the applicable emission limit according to §63.7530(c) or (d) as applicable; and
	b. Keeping monthly records of fuel use according to §63.7540(a).

Table 9 to Subpart DDDDD of Part 63—Reporting Requirements

As stated in §63.7550, you must comply with the following requirements for reports:

You must submit a(n)	The report must contain . . .	You must submit the report . . .
1. Compliance report	a. Information required in §63.7550(c)(1) through (11); and	Semiannually according to the requirements in §63.7550(b).
	b. If there are no deviations from any emission limitation (emission limit and operating limit) that applies to you and there are no deviations from the requirements for work practice standards in Table 8 to this subpart that apply to you, a statement that there were no deviations from the emission limitations and work practice standards during the reporting period. If there were no periods during which the CMSs, including continuous emissions monitoring system, continuous opacity monitoring system, and operating parameter monitoring systems, were out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CMSs were out-of-control during the reporting period; and	

You must submit a(n)	The report must contain . . .	You must submit the report . . .
	c. If you have a deviation from any emission limitation (emission limit and operating limit) or work practice standard during the reporting period, the report must contain the information in §63.7550(d). If there were periods during which the CMSs, including continuous emissions monitoring system, continuous opacity monitoring system, and operating parameter monitoring systems, were out-of-control, as specified in §63.8(c)(7), the report must contain the information in §63.7550(e); and	
	d. If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i)	
2. An immediate startup, shutdown, and malfunction report if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard	a. Actions taken for the event; and	i. By fax or telephone within 2 working days after starting actions inconsistent with the plan; and
	b. The information in §63.10(d)(5)(ii)	ii. By letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority.

Table 10 to Subpart DDDDD of Part 63—Applicability of General Provisions to Subpart DDDDD

As stated in §63.7565, you must comply with the applicable General Provisions according to the following:

Citation	Subject	Brief description	Applicable
§63.1	Applicability	Initial Applicability Determination; Applicability After Standard Established; Permit Requirements; Extensions, Notifications	Yes.
§63.2	Definitions	Definitions for part 63 standards	Yes.

Citation	Subject	Brief description	Applicable
§63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes.
§63.4	Prohibited Activities	Prohibited Activities; Compliance date; Circumvention, Severability	Yes.
§63.5	Construction/Reconstruction	Applicability; applications; approvals	Yes.
§63.6(a)	Applicability	GP apply unless compliance extension; and GP apply to area sources that become major	Yes.
§63.6(b)(1)–(4)	Compliance Dates for New and Reconstructed sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for 112(f)	Yes.
§63.6(b)(5)	Notification	Must notify if commenced construction or reconstruction after proposal	Yes.
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources That Become Major	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source	Yes.
§63.6(c)(1)–(2)	Compliance Dates for Existing Sources	Comply according to date in subpart, which must be no later than 3 years after effective date; and for 112(f) standards, comply within 90 days of effective date unless compliance extension	Yes.
§63.6(c)(3)–(4)	[Reserved]		
§63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major	Area sources that become major must comply with major source standards by date indicated in subpart or by equivalent time period (for example, 3 years)	Yes.
§63.6(d)	[Reserved]		
§63.6(e)(1)–(2)	Operation & Maintenance	Operate to minimize emissions at all times; and Correct malfunctions as soon as practicable; and Operation and maintenance requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met	Yes.
§63.6(e)(3)	Startup, Shutdown, and Malfunction Plan (SSMP)	Requirement for SSM and startup, shutdown, malfunction plan; and content of SSMP	Yes.
§63.6(f)(1)	Compliance Except During SSM	Comply with emission standards at all times except during SSM	Yes.

Citation	Subject	Brief description	Applicable
§63.6(f)(2)–(3)	Methods for Determining Compliance	Compliance based on performance test, operation and maintenance plans, records, inspection	Yes.
§63.6(g)(1)–(3)	Alternative Standard	Procedures for getting an alternative standard	Yes.
§63.6(h)(1)	Compliance with Opacity/VE Standards	Comply with opacity/VE emission limitations at all times except during SSM	Yes.
§63.6(h)(2)(i)	Determining Compliance with Opacity/Visible Emission (VE) Standards	If standard does not state test method, use Method 9 for opacity and Method 22 for VE	No.
§63.6(h)(2)(ii)	[Reserved]		
§63.6(h)(2)(iii)	Using Previous Tests to Demonstrate Compliance with Opacity/VE Standards	Criteria for when previous opacity/VE testing can be used to show compliance with this subpart	Yes.
§63.6(h)(3)	[Reserved]		
§63.6(h)(4)	Notification of Opacity/VE Observation Date	Notify Administrator of anticipated date of observation	No.
§63.6(h)(5)(i),(iii)–(v)	Conducting Opacity/VE Observations	Dates and Schedule for conducting opacity/VE observations	No.
§63.6(h)(5)(ii)	Opacity Test Duration and Averaging Times	Must have at least 3 hours of observation with thirty, 6-minute averages	No.
§63.6(h)(6)	Records of Conditions During Opacity/VE observations	Keep records available and allow Administrator to inspect	No.
§63.6(h)(7)(i)	Report continuous opacity monitoring system Monitoring Data from Performance Test	Submit continuous opacity monitoring system data with other performance test data	Yes.
§63.6(h)(7)(ii)	Using continuous opacity monitoring system instead of Method 9	Can submit continuous opacity monitoring system data instead of Method 9 results even if subpart requires Method 9, but must notify Administrator before performance test	No.
§63.6(h)(7)(iii)	Averaging time for continuous opacity monitoring system during performance test	To determine compliance, must reduce continuous opacity monitoring system data to 6-minute averages	Yes.
§63.6(h)(7)(iv)	Continuous opacity monitoring system requirements	Demonstrate that continuous opacity monitoring system performance evaluations are conducted according to §§63.8(e), continuous opacity monitoring systems are properly maintained and operated according to §63.8(c) and data quality as §63.8(d)	Yes.

Citation	Subject	Brief description	Applicable
§63.6(h)(7)(v)	Determining Compliance with Opacity/VE Standards	Continuous opacity monitoring system is probative but not conclusive evidence of compliance with opacity standard, even if Method 9 observation shows otherwise. Requirements for continuous opacity monitoring system to be probative evidence-proper maintenance, meeting PS 1, and data have not been altered	Yes.
§63.6(h)(8)	Determining Compliance with Opacity/VE Standards	Administrator will use all continuous opacity monitoring system, Method 9, and Method 22 results, as well as information about operation and maintenance to determine compliance	Yes.
§63.6(h)(9)	Adjusted Opacity Standard	Procedures for Administrator to adjust an opacity standard	Yes.
§63.6(i)(1)–(14)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension	Yes.
§63.6(j)	Presidential Compliance Exemption	President may exempt source category from requirement to comply with rule	Yes.
§63.7(a)(1)	Performance Test Dates	Dates for Conducting Initial Performance Testing and Other Compliance Demonstrations	Yes.
§63.7(a)(2)	Performance Test Dates	New source with initial startup date before effective date has 180 days after effective date to demonstrate compliance	Yes.
§63.7(a)(2)(ii–viii)	[Reserved]		
§63.7(a)(2)(ix)	Performance Test Dates	1. New source that commenced construction between proposal and promulgation dates, when promulgated standard is more stringent than proposed standard, has 180 days after effective date or 180 days after startup of source, whichever is later, to demonstrate compliance; and	Yes.
		2. If source initially demonstrates compliance with less stringent proposed standard, it has 3 years and 180 days after the effective date of the standard or 180 days after startup of source, whichever is later, to demonstrate compliance with promulgated standard	No.
§63.7(a)(3)	Section 114 Authority	Administrator may require a performance test under CAA Section 114 at any time	Yes.
§63.7(b)(1)	Notification of Performance Test	Must notify Administrator 60 days before the test	No.

Citation	Subject	Brief description	Applicable
§63.7(b)(2)	Notification of Rescheduling	If rescheduling a performance test is necessary, must notify Administrator 5 days before scheduled date of rescheduled date	Yes.
§63.7(c)	Quality Assurance/Test Plan	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with: test plan approval procedures; and performance audit requirements; and internal and external QA procedures for testing	Yes.
§63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.
§63.7(e)(1)	Conditions for Conducting Performance Tests	1. Performance tests must be conducted under representative conditions; and	No.
		2. Cannot conduct performance tests during SSM; and	Yes.
		3. Not a deviation to exceed standard during SSM; and	Yes.
		4. Upon request of Administrator, make available records necessary to determine conditions of performance tests	Yes.
§63.7(e)(2)	Conditions for Conducting Performance Tests	Must conduct according to rule and EPA test methods unless Administrator approves alternative	Yes.
§63.7(e)(3)	Test Run Duration	Must have three separate test runs; and Compliance is based on arithmetic mean of three runs; and conditions when data from an additional test run can be used	Yes.
§63.7(e)(4)	Interaction with other sections of the Act	Nothing in §63.7(e)(1) through (4) can abrogate the Administrator's authority to require testing under Section 114 of the Act	Yes.
§63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an alternative test method	Yes.
§63.7(g)	Performance Test Data Analysis	Must include raw data in performance test report; and must submit performance test data 60 days after end of test with the Notification of Compliance Status; and keep data for 5 years	Yes.
§63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test	Yes.
§63.8(a)(1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in standard	Yes.
§63.8(a)(2)	Performance Specifications	Performance Specifications in appendix B of part 60 apply	Yes.

Citation	Subject	Brief description	Applicable
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring with Flares	Unless your rule says otherwise, the requirements for flares in §63.11 apply	No.
§63.8(b)(1)(i)–(ii)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative	Yes.
§63.8(b)(1)(iii)	Monitoring	Flares not subject to this section unless otherwise specified in relevant standard	No.
§63.8(b)(2)–(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing monitoring systems; and must install on each effluent before it is combined and before it is released to the atmosphere unless Administrator approves otherwise; and if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup	Yes.
§63.8(c)(1)	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with good air pollution control practices	Yes.
§63.8(c)(1)(i)	Routine and Predictable SSM	Maintain and operate CMS according to §63.6(e)(1)	Yes.
§63.8(c)(1)(ii)	SSM not in SSMP	Must keep necessary parts available for routine repairs of CMSs	Yes.
§63.8(c)(1)(iii)	Compliance with Operation and Maintenance	Must develop an SSMP for CMS	Yes.
§63.8(c)(2)–(3)	Monitoring System Installation	Must install to get representative emission and parameter measurements; and must verify operational status before or at performance test	Yes.
§63.8(c)(4)	Continuous Monitoring System (CMS) Requirements	CMSs must be operating except during breakdown, out-of-control, repair, maintenance, and high-level calibration drifts	No.
§63.8(c)(4)(i)	Continuous Monitoring System (CMS) Requirements	Continuous opacity monitoring system must have a minimum of one cycle of sampling and analysis for each successive 10-second period and one cycle of data recording for each successive 6-minute period	Yes.
§63.8(c)(4)(ii)	Continuous Monitoring System (CMS) Requirements	Continuous emissions monitoring system must have a minimum of one cycle of operation for each successive 15-minute period	No.

Citation	Subject	Brief description	Applicable
§63.8(c)(5)	Continuous Opacity Monitoring system (COMS) Requirements	Must do daily zero and high level calibrations	Yes.
§63.8(c)(6)	Continuous Monitoring System (CMS) Requirements	Must do daily zero and high level calibrations	No.
§63.8(c)(7)–(8)	Continuous Monitoring Systems Requirements	Out-of-control periods, including reporting	Yes.
§63.8(d)	Continuous Monitoring Systems Quality Control	Requirements for continuous monitoring systems quality control, including calibration, etc.; and must keep quality control plan on record for the life of the affected source. Keep old versions for 5 years after revisions	Yes.
§63.8(e)	Continuous monitoring systems Performance Evaluation	Notification, performance evaluation test plan, reports	Yes.
§63.8(f)(1)–(5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	Yes.
§63.8(f)(6)	Alternative to Relative Accuracy Test	Procedures for Administrator to approve alternative relative accuracy tests for continuous emissions monitoring system	No.
§63.8(g)(1)–(4)	Data Reduction	Continuous opacity monitoring system 6-minute averages calculated over at least 36 evenly spaced data points; and continuous emissions monitoring system 1-hour averages computed over at least 4 equally spaced data points	Yes.
§63.8(g)(5)	Data Reduction	Data that cannot be used in computing averages for continuous emissions monitoring system and continuous opacity monitoring system	No.
§63.9(a)	Notification Requirements	Applicability and State Delegation	Yes.
§63.9(b)(1)–(5)	Initial Notifications	Submit notification 120 days after effective date; and Notification of intent to construct/reconstruct; and Notification of commencement of construct/reconstruct; Notification of startup; and Contents of each	Yes.
§63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed BACT/LAER	Yes.
§63.9(d)	Notification of Special Compliance Requirements for New Source	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date	Yes.
§63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	No.
§63.9(f)	Notification of VE/Opacity Test	Notify Administrator 30 days prior	No.

Citation	Subject	Brief description	Applicable
§63.9(g)	Additional Notifications When Using Continuous Monitoring Systems	Notification of performance evaluation; and notification using continuous opacity monitoring system data; and notification that exceeded criterion for relative accuracy	Yes.
§63.9(h)(1)–(6)	Notification of Compliance Status	Contents; and due 60 days after end of performance test or other compliance demonstration, and when to submit to Federal vs. State authority	Yes.
§63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change in when notifications must be submitted	Yes.
§63.9(j)	Change in Previous Information	Must submit within 15 days after the change	Yes.
§63.10(a)	Recordkeeping/Reporting	Applies to all, unless compliance extension; and when to submit to Federal vs. State authority; and procedures for owners of more than 1 source	Yes.
§63.10(b)(1)	Recordkeeping/Reporting	General Requirements; and keep all records readily available and keep for 5 years	Yes.
§63.10(b)(2)(i)–(v)	Records related to Startup, Shutdown, and Malfunction	Occurrence of each of operation (process, equipment); and occurrence of each malfunction of air pollution equipment; and maintenance of air pollution control equipment; and actions during startup, shutdown, and malfunction	Yes.
§63.10(b)(2)(vi) and (x–xi)	Continuous monitoring systems Records	Malfunctions, inoperative, out-of-control; and calibration checks; and adjustments, maintenance	Yes.
§63.10(b)(2)(vii)–(ix)	Records	Measurements to demonstrate compliance with emission limitations; and performance test, performance evaluation, and visible emission observation results; and measurements to determine conditions of performance tests and performance evaluations.	Yes.
§63.10(b)(2)(xii)	Records	Records when under waiver	Yes.
§63.10(b)(2)(xiii)	Records	Records when using alternative to relative accuracy test	No.
§63.10(b)(2)(xiv)	Records	All documentation supporting Initial Notification and Notification of Compliance Status	Yes.
§63.10(b)(3)	Records	Applicability Determinations	Yes.

Citation	Subject	Brief description	Applicable
§63.10(c)(1),(5)–(8),(10)–(15)	Records	Additional Records for continuous monitoring systems	Yes.
§63.10(c)(7)–(8)	Records	Records of excess emissions and parameter monitoring exceedances for continuous monitoring systems	No.
§63.10(d)(1)	General Reporting Requirements	Requirement to report	Yes.
§63.10(d)(2)	Report of Performance Test Results	When to submit to Federal or State authority	Yes.
§63.10(d)(3)	Reporting Opacity or VE Observations	What to report and when	Yes.
§63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension	Yes.
§63.10(d)(5)	Startup, Shutdown, and Malfunction Reports	Contents and submission	Yes.
§63.10(e)(1)(2)	Additional continuous monitoring systems Reports	Must report results for each CEM on a unit; and written copy of performance evaluation; and 3 copies of continuous opacity monitoring system performance evaluation	Yes.
§63.10(e)(3)	Reports	Excess Emission Reports	No.
§63.10(e)(3)(i–iii)	Reports	Schedule for reporting excess emissions and parameter monitor exceedance (now defined as deviations)	No.
§63.10(e)(3)(iv–v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedance (now defined as deviations); and provision to request semiannual reporting after compliance for one year; and submit report by 30th day following end of quarter or calendar half; and if there has not been an exceedance or excess emission (now defined as deviations), report contents is a statement that there have been no deviations	No.
§63.10(e)(3)(iv–v)	Excess Emissions Reports	Must submit report containing all of the information in §63.10(c)(5–13), §63.8(c)(7–8)	No.
§63.10(e)(3)(vi–viii)	Excess Emissions Report and Summary Report	Requirements for reporting excess emissions for continuous monitoring systems (now called deviations); Requires all of the information in §63.10(c)(5–13), §63.8(c)(7–8)	No.

Citation	Subject	Brief description	Applicable
§63.10(e)(4)	Reporting continuous opacity monitoring system data	Must submit continuous opacity monitoring system data with performance test data	Yes.
§63.10(f)	Waiver for Recordkeeping/Reporting	Procedures for Administrator to waive	Yes.
§63.11	Flares	Requirements for flares	No.
§63.12	Delegation	State authority to enforce standards	Yes.
§63.13	Addresses	Addresses where reports, notifications, and requests are sent	Yes.
§63.14	Incorporation by Reference	Test methods incorporated by reference	Yes.
§63.15	Availability of Information	Public and confidential Information	Yes.

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Appendix A to Subpart DDDDD of Part 63—Methodology and Criteria for Demonstrating Eligibility for the Health-Based Compliance Alternatives

1. Purpose/Introduction

This appendix provides the methodology and criteria for demonstrating that your affected source is eligible for the compliance alternative for the HCl emission limit and/or the total selected metals (TSM) emission limit. This appendix specifies emissions testing methods that you must use to determine HCl, chlorine, and manganese emissions from the affected units and what parts of the affected source facility must be included in the eligibility demonstration. You must demonstrate that your affected source is eligible for the health-based compliance alternatives using either a look-up table analysis (based on the look-up tables included in this appendix) or a site-specific compliance demonstration performed according to the criteria specified in this appendix. This appendix also specifies how and when you file any eligibility demonstrations for your affected source and how to show that your affected source remains eligible for the health-based compliance alternatives in the future.

2. Who Is Eligible To Demonstrate That They Qualify for the Health-Based Compliance Alternatives?

Each new, reconstructed, or existing affected source may demonstrate that they are eligible for the health-based compliance alternatives. Section 63.7490 of subpart DDDDD defines the affected source and explains which affected sources are new, existing, or reconstructed.

3. What Parts of My Facility Have To Be Included in the Health-Based Eligibility Demonstration?

If you are attempting to determine your eligibility for the compliance alternative for HCl, you must include every emission point subject to subpart DDDDD that emits either HCl or Cl_2in the eligibility demonstration.

If you are attempting to determine your eligibility for the compliance alternative for TSM, you must include every emission point subject to subpart DDDDD that emits manganese in the eligibility demonstration.

4. How Do I Determine HAP Emissions From My Affected Source?

(a) You must conduct HAP emissions tests or fuel analysis for every emission point covered under subpart DDDDD within the affected source facility according to the requirements in paragraphs (b) through (f) of this section and the methods specified in Table 1 of this appendix.

(1) If you are attempting to determine your eligibility for the compliance alternative for HCl, you must test the subpart DDDDD units at your facility for both HCl and Cl_2. When conducting fuel analysis, you must assume any chlorine detected will be emitted as Cl_2.

(2) If you are attempting to determine your eligibility for the compliance alternative for TSM, you must test the subpart DDDDD units at your facility for manganese.

(b) *Periods when emissions tests must be conducted.* (1) You must not conduct emissions tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).

(2) You must test under worst-case operating conditions as defined in this appendix. You must describe your worst-case operating conditions in your performance test report for the process and control systems (if applicable) and explain why the conditions are worst-case.

(c) *Number of test runs.* You must conduct three separate test runs for each test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour.

(d) *Sampling locations.* Sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.

(e) *Collection of monitoring data for HAP control devices.* During the emissions test, you must collect operating parameter monitoring system data at least every 15 minutes during the entire emissions test and establish the site-specific operating requirements in Tables 3 or 4, as appropriate, of subpart DDDDD using data from the monitoring system and the procedures specified in §63.7530 of subpart DDDDD.

(f) *Nondetect data.* You may treat emissions of an individual HAP as zero if all of the test runs result in a nondetect measurement and the condition in paragraph (f)(1) of this section is met for the manganese test method. Otherwise, nondetect data for individual HAP must be treated as one-half of the method detection limit.

(1) For manganese measured using Method 29 in appendix A to 40 CFR part 60, you analyze samples using atomic absorption spectroscopy (AAS).

(g) You must determine the maximum hourly emission rate for each appropriate emission point according to Equation 1 of this appendix. An appropriate emission point is any emission point emitting HCl, Cl_2, or Manganese from a subpart DDDDD emission unit.

$$E_{i,s} = \sum_{j=1}^{t} \left(R_{i,j} \times I_j\right) \qquad \text{(Eq. 1)}$$

Where:

$E_{i,s}$= maximum hourly emission rate for HAP i at each emission point s associated with a subpart DDDDD emission unit j, lbs/hr

i = applicable HAP, where i = (HCl, Cl_2, or Manganese) s = individual emission point

j = each subpart DDDDD emission unit associated with an emission point, s

t = total number of subpart DDDDD emission units associated with an emission point s

$R_{i,j}$= emission rate (the 3-run average as determined according to table 1 of this appendix or the pollutant concentration in the fuel samples analyzed according to §63.7521) for HAP i at subpart DDDDD emission unit j associated with emission point s, lb per million Btu.

I_j= Maximum rated heat input capacity of each subpart DDDDD unit j emitting HAP i associated with emission point s, million Btu per hour.

5. What Are the Criteria for Determining If My Facility Is Eligible for the Health-Based Compliance Alternatives?

(a) Determine the HAP emissions from each appropriate emission point within the affected source facility using the procedures specified in section 4 of this appendix.

(b) Demonstrate that your facility is eligible for either of the health-based compliance alternatives using either the methods described in section 6 of this appendix (look-up table analysis) or section 7 of this appendix (site-specific compliance demonstration).

(c) Your facility is eligible for the health-based compliance alternative for HCl if one of the following two statements is true:

(1) The calculated HCl-equivalent emission rate is below the appropriate value in the look-up table;

(2) Your site-specific compliance demonstration indicates that none of your HI values for HCl and $CL_2$are greater than 1.0 at locations where people live or congregate (e.g., schools, daycare centers, etc.);

(d) Your facility is eligible for the health-based compliance alternative for TSM if one of the following two statements is true:

(1) The manganese emission rate for all your subpart DDDDD sources is below the appropriate value in the look-up table;

(2) Your site-specific compliance demonstration indicates that none of your HQ values for manganese are greater than 1.0 at locations where people live or congregate (e.g., schools, daycare centers, etc.).

6. How Do I Conduct a Look-Up Table Analysis?

You may use look-up tables to demonstrate that your facility is eligible for either the compliance alternative for HCl emissions limit or the compliance alternative for the TSM emissions limit, unless your permitting authority determines that the look-up table analysis in this section is not applicable to your facility on technical grounds due to site-specific variations that are not accounted for in the look-up table analysis (e.g. presence of complex terrain, rain caps, or building downwash effects).

(a) *HCl compliance alternative.* (1) Using the emission rates for HCl and Cl_2determined according to section 4 of this appendix, calculate, using equation 2 of this appendix, the toxicity-weighted emission rate (expressed in HCl-equivalents) for each emission point that emits HCl or $Cl_2$from any subpart DDDDD sources. Then, calculate the weighted average stack height using equation 3 of this appendix.

$$TW_s = E_{HCl,s} + E_{Cl_2,s}\left(\frac{RV_{HCl}}{RV_{Cl_2}}\right) \qquad \text{(Eq. 2)}$$

Where:

TW_s= the toxicity-weighted emission rate (in HCl-equivalent) for each emission point s, lb/hr.

s = individual emission points

$E_{HCl,s}$= the maximum hourly emission rate for HCl at emission point s, lb/hr

$E_{Cl2,s}$= the maximum hourly emission rate for Cl_2at emission point s, lb/hr

RV_{Cl2}= the reference value for Cl_2

RV_{HCl}= the reference value for HCl

(reference values for HCl and Cl_2can be found at *http://www.epa.gov/ttn/atw/toxsource/summary.html*).

$$H_{HCl} = \frac{\sum_{s=1}^{n}(TW_s \times H_s)}{TW_T} \qquad \text{(Eq. 3)}$$

Where:

H_{HCl}= weighted average stack height for determining the maximum allowable HCl-equivalent emission rate (in Table 2 to this appendix), m.

s = individual emission points

n = total number of emission points

TW_s= toxicity-weighted HCl-equivalent emission rate from each emission point (from equation 2), lb/hr.

H_s= height of each individual stack, m

TW_T= total toxicity-weighted HCl-equivalent emission rate from the source (summed for all emission points), lb/hr.

(2) Calculate the total toxicity-weighted emission rate for your affected source by summing the toxicity-weighted emission rate for each appropriate subpart DDDDD emission point.

(3) Using the weighted average stack height and the minimum distance between any appropriate subpart DDDDD emission point at the source and the property boundary, identify the appropriate maximum allowable toxicity weighted emission rate for your affected source, expressed in HCl-equivalents, from table 2 of this appendix. Appropriate emission points are those that emit HCl or Cl_2, or both, from subpart DDDDD units. If one or both of these values does not match the exact values in the look-up tables, then use the next lowest table value. (Note:If your weighted average stack height is less than 5 meters (m), you must use the 5 meter row.) Your affected source is eligible to comply with the health-based alternative for HCl emissions if the value calculated in paragraph (a)(2) of this section, determined using the methods specified in this appendix, does not exceed the appropriate value in table 2 of this appendix.

(b) *TSM Compliance Alternative.* Using the emission rates for manganese determined according to section 4 of this appendix, calculate the total manganese emission rate for your affected source by summing the maximum hourly manganese emission rates for all your subpart DDDDD units. Identify the appropriate allowable emission rate in table 3 of this appendix for your affected source using the weighted average stack height value and the minimum distance between any appropriate subpart DDDDD emission point at the facility and the property boundary. Appropriate emission points are those that emit manganese from subpart DDDDD units. If one or both of these values does not match the exact values in the look-up tables, then use the next lowest table value. (Note:If your weighted average stack height is less than 5 meters, you must use the 5 meter row.) Your affected source is eligible to comply with the health-based alternative for manganese emissions and may exclude manganese when demonstrating compliance with the TSM emission limit if the total manganese emission rate, determined using the methods specified in this appendix, does not exceed the appropriate value specified in table 3 of this appendix.

$$H_{Mn} = \frac{\sum_{s=1}^{n}\left(E_{Mn,s} \times H_s\right)}{E_{Mn,T}} \qquad \text{(Eq. 4)}$$

Where:

H_{Mn}= weighted average stack height for determining the maximum allowable emission rate for manganese (in table 3 to this appendix), m.

s = individual emission points

n = total number of emission points

$E_{Mn,s}$= maximum hourly manganese emissions from emission point s, lbs/hr.

H_s= height of each individual stack s

$E_{Mn,T}$= total maximum hourly manganese emissions from affected source (sum emission rates from all emission points), lb/hr

7. How Do I Conduct a Site-Specific Compliance Demonstration?

If you fail to demonstrate that your facility is able to comply with one or both of the alternative health-based emission standards using the look-up table approach, you may choose to perform a site-specific compliance demonstration for your facility. You may use any scientifically-accepted peer-reviewed risk assessment methodology for your site-specific compliance demonstration. An example of one approach for performing a site-specific compliance demonstration for air toxics can be found in the EPA's “Air Toxics Risk Assessment Reference Library, Volume 2, Site-Specific Risk Assessment Technical Resource Document”, which may be obtained through the EPA's Air Toxics Web site at *http://www.epa.gov/ttn/fera/risk_atoxic.html.*

(a) Your facility is eligible for the HCl alternative compliance option if your site-specific compliance demonstration shows that the maximum HI for HCl and $Cl_2$from your subpart DDDDD sources is less than or equal to 1.0.

(b) Your facility is eligible for the TSM alternative compliance option if your site-specific compliance demonstration shows that the maximum HQ for manganese from your subpart DDDDD sources is less than or equal to 1.0.

(c) At a minimum, your site-specific compliance demonstration must:

(1) Estimate long-term inhalation exposures through the estimation of annual or multi-year average ambient concentrations;

(2) Estimate the inhalation exposure for the individual most exposed to the facility's emissions;

(3) Use site-specific, quality-assured data wherever possible;

(4) Use health-protective default assumptions wherever site-specific data are not available, and;

(5) Contain adequate documentation of the data and methods used for the assessment so that it is transparent and can be reproduced by an experienced risk assessor and emissions measurement expert.

(d) Your site-specific compliance demonstration need not:

(1) Assume any attenuation of exposure concentrations due to the penetration of outdoor pollutants into indoor exposure areas;

(2) Assume any reaction or deposition of the emitted pollutants during transport from the emission point to the point of exposure.

8. What Must My Health-Based Eligibility Demonstration Contain?

(a) Your health-based eligibility demonstration must contain, at a minimum, the information specified in paragraphs (a)(1) through (6) of this section.

(1) Identification of each appropriate emission point at the affected source facility, including the maximum rated capacity of each appropriate emission point.

(2) Stack parameters for each appropriate emission point including, but not limited to, the parameters listed in paragraphs (a)(2)(i) through (iv) below:

(i) Emission release type.

(ii) Stack height, stack area, stack gas temperature, and stack gas exit velocity.

(iii) Plot plan showing all emission points, nearby residences, and fenceline.

(iv) Identification of any control devices used to reduce emissions from each appropriate emission point.

(3) Emission test reports for each pollutant and appropriate emission point which has been tested using the test methods specified in Table 1 of this appendix, including a description of the process parameters identified as being worst case. Fuel analyses for each fuel and emission point which has been conducted including collection and analytical methods used.

(4) Identification of the RfC values used in your look-up table analysis or site-specific compliance demonstration.

(5) Calculations used to determine the HCl-equivalent or manganese emission rates according to sections 6(a) or (b) of this appendix.

(6) Identification of the controlling process factors (including, but not limited to, fuel type, heat input rate, type of control devices, process parameters reflecting the emissions rates used for your eligibility demonstration) that will become Federally enforceable permit conditions used to show that your facility remains eligible for the health-based compliance alternatives.

(b) If you use the look-up table analysis in section 6 of this appendix to demonstrate that your facility is eligible for either health-based compliance alternative, your eligibility demonstration must contain, at a minimum, the information in paragraphs (a) and (b)(1) through (3) of this section.

(1) Calculations used to determine the weighted average stack height of the subpart DDDDD emission points that emit manganese, HCl, or Cl_2.

(2) Identification of the subpart DDDDD emission point, that emits either manganese or HCl and Cl_2, with the minimum distance to the property boundary of the facility.

(3) Comparison of the values in the look-up tables (Tables 2 and 3 of this appendix) to your maximum HCl-equivalent or manganese emission rates.

(c) If you use a site-specific compliance demonstration as described in section 7 of this appendix to demonstrate that your facility is eligible, your eligibility demonstration must contain, at a minimum, the information in paragraphs (a) and (c)(1) through (7) of this section:

(1) Identification of the risk assessment methodology used.

(2) Documentation of the fate and transport model used.

(3) Documentation of the fate and transport model inputs, including the information described in paragraphs (a)(1) through (5) of this section converted to the dimensions required for the model and all of the following that apply: meteorological data; building, land use, and terrain data; receptor locations and population data; and other facility-specific parameters input into the model.

(4) Documentation of the fate and transport model outputs.

(5) Documentation of any exposure assessment and risk characterization calculations.

(6) Comparison of the HQ HI to the limit of 1.0.

(d) To be eligible for either health-based compliance alternative, the parameters that defined your affected source as eligible for the health-based compliance alternatives must be submitted to your permitting authority for incorporation into your title V permit, as federally enforceable limits, at the same time you submit your health-based eligibility demonstration. These parameters include, but are not limited to, fuel type, fuel mix (annual average), emission rate, type of control devices, process parameters (e.g., maximum heat input), and non-process parameters (e.g., stack height).

9. When Do I Have To Complete and Submit My Health-Based Eligibility Demonstration?

(a) If you have an existing affected source, you must complete and submit your eligibility demonstration to your permitting authority, along with a signed certification that the demonstration is an accurate depiction of your facility, no later than the date one year prior to the compliance date of subpart DDDDD. A separate copy of the eligibility demonstration must be submitted to: U.S. EPA, Risk and Exposure Assessment Group, Emission Standards Division (C404–01), Attn: Group Leader, Research Triangle Park, North Carolina 27711, electronic mail address *REAG@epa.gov.*

(b) If you have a new or reconstructed affected source that starts up before the effective date of subpart DDDDD, or an affected source that is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP before the effective date of subpart DDDDD, then you may submit an eligibility demonstration at any time after September 13, 2004 but you must comply with the emissions limits in table 1 to this subpart and all other requirements of subpart DDDDD until your eligibility demonstration is submitted to your permitting authority in accordance with the requirements of section 10 of this appendix.

(c) If you have a new or reconstructed affected source that starts up after the effective date of subpart DDDDD, or an affected source that is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP after the effective date for subpart DDDDD, then you must follow the schedule in paragraphs (c)(1) and (2) of this section.

(1) You must complete and submit a preliminary eligibility demonstration based on the information (e.g., equipment types, estimated emission rates, process and non-process parameters, reference values, etc.) that will be used to apply for your title V permit. This preliminary eligibility demonstration must be submitted with your application for approval of construction or reconstruction. You must base your preliminary eligibility demonstration on the maximum emissions allowed under your title V permit. If the preliminary eligibility demonstration indicates that your affected source facility is eligible for either compliance alternative, then you may start up your new affected source and your new affected source will be considered in compliance with the alternative standard and subject to the compliance requirements in this appendix.

(2) You must conduct the emission tests or analyses specified in section 4 of this appendix upon initial startup and use the results of these emissions tests to complete and submit your eligibility demonstration within 180 days following your initial startup date.

10. When Do I Become Eligible for the Health-Based Compliance Alternatives?

(a) For existing sources, new sources, or reconstructed sources that start up before the effective date of subpart DDDDD, or an affected source that is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP before the effective date of subpart DDDDD, you are eligible to comply with a health-based compliance alternative upon submission of a complete demonstration meeting all the requirements of paragraph 8 for the applicable alternative. However, your eligibility demonstration may be reviewed by the permitting authority or by EPA to verify that the demonstration meets the requirements of appendix A to this subpart and is technically sound (i.e. use of the look-up tables is appropriate or the site-specific assessment is technically valid). If you are notified by the permitting authority or by EPA of any deficiencies in your submission, then you are not eligible for the health-based compliance alternative until the permitting authority or EPA verifies that the deficiencies are corrected.

(b) For new or reconstructed sources that start up after the effective date of subpart DDDDD, you are eligible to comply with a the health-based compliance alternatives upon submission of a complete preliminary eligibility determination in accordance with paragraph (c)(1) of section 9 that demonstrates your affected source is eligible for the applicable alternative. You may then start up your source and conduct the necessary testing in accordance with paragraph (c)(2) of section 9. The eligibility demonstration submitted in accordance with paragraph (c)(2) of section 9 may be reviewed by the permitting authority or by EPA to verify that the demonstration meets the requirements of appendix A to this subpart and is technically sound (i.e. use of the look-up tables is appropriate or the site-specific assessment is technically valid). If you are notified in writing by the permitting authority of any deficiencies in your submission, then you have 30 days to correct the deficiencies unless the permitting authority agrees to extend this time to a period not to exceed 90 days. If the deficiencies are not corrected within the applicable time period, you will not be eligible for the health-based compliance alternative until the permitting authority verifies that the deficiencies are corrected.

(c) If the title V permit conditions requested in accordance with paragraph (d) of section 8 are disapproved by the permitting authority, then your affected source must comply with the applicable emission limits, operating limits, and work practice standards in subpart DDDDD by the compliance dates specified in §63.7495. Until the requested conditions (or alternative conditions meeting the requirements of paragraph (d) of section 8) are incorporated into the permit, compliance with the proposed conditions shall be considered compliance with the health-based alternative.

11. How Do I Ensure That My Facility Remains Eligible for the Health-Based Compliance Alternatives?

(a) You must update your eligibility demonstration and resubmit it each time that any of the parameters that defined your affected source as eligible for the health-based compliance alternatives changes in a way that could result in increased HAP emissions or increased risk from exposure to emissions. These parameters include, but are not limited to, fuel type, fuel mix (annual average), type of control devices, HAP emission rate, stack height, process parameters (e.g., heat input capacity), relevant reference values, and locations where people live).

(b) If you are updating your eligibility demonstration to account for an action in paragraph (a) of this section that is under your control (e.g. change in heat input capacity of your boiler), you must submit your revised eligibility demonstration to the permitting authority prior to making the change and revise your permit to incorporate the change. If your affected source is no longer eligible for the health-based compliance alternatives, then you must comply with the applicable emission limits, operating limits, and compliance requirements in subpart DDDDD prior to making the process change and revising your permit. If you are updating your eligibility demonstration to account for an action in paragraph (a) of this section that is outside of your control (e.g. change in a reference value), and that change causes your source to no longer be able to meet the criteria for the health-based compliance alternatives, your source must comply with the applicable emission limits, operating limits, and compliance requirements in subpart DDDDD within 3 years.

(c) Your revised eligibility demonstration may be reviewed by the permitting authority or EPA to verify that the demonstration meets the requirements of appendix A to this subpart and is technically sound (i.e. use of the look-up tables is appropriate or the site-specific assessment is technically valid). If you are notified by the permitting authority or EPA of any deficiencies in your submission, you will not remain eligible for the health-based compliance alternatives until the permitting authority or EPA verifies that the deficiencies are corrected.

12. What Records Must I Keep?

You must keep records of the information used in developing the eligibility demonstration for your affected source, including all of the information specified in section 8 of this appendix.

13. Definitions

The definitions in §63.7575 of subpart DDDDD apply to this appendix. Additional definitions applicable for this appendix are as follows:

Hazard Index (HI) means the sum of more than one hazard quotient for multiple substances and/or multiple exposure pathways.

Hazard Quotient (HQ) means the ratio of the predicted media concentration of a pollutant to the media concentration at which no adverse effects are expected. For inhalation exposures, the HQ is calculated as the air concentration divided by the RfC.

Look-up table analysis means a risk screening analysis based on comparing the HAP or HAP-equivalent emission rate from the affected source to the appropriate maximum allowable HAP or HAP-equivalent emission rates specified in Tables 2 and 3 of this appendix.

Reference Concentration (RfC) means an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime. It can be derived from various types of human or animal data, with uncertainty factors generally applied to reflect limitations of the data used.

Worst-case operating conditions means operation of an affected unit during emissions testing under the conditions that result in the highest HAP emissions or that result in the emissions stream composition (including HAP and non-HAP) that is most challenging for the control device if a control device is used. For example, worst-case conditions could include operation of an affected unit firing solid fuel likely to produce the most HAP.

Table 1 to Appendix B of Subpart DDDDD—Emission Test Methods

For . . .	You must . . .	Using . . .
(1) Each subpart DDDDD emission point for which you choose to use a compliance alternative	Select sampling ports' location and the number of traverse points	Method 1 of 40 CFR part 60, appendix A.
(2) Each subpart DDDDD emission point for which you choose to use a compliance alternative	Determine velocity and volumetric flow rate;	Method 2, 2F, or 2G in appendix A to 40 CFR part 60.
(3) Each subpart DDDDD emission point for which you choose to use a compliance alternative	Conduct gas molecular weight analysis	Method 3A or 3B in appendix A to 40 CFR part 60.
(4) Each subpart DDDDD emission point for which you choose to use a compliance alternative	Measure moisture content of the stack gas	Method 4 in appendix A to 40 CFR part 60.
(5) Each subpart DDDDD emission point for which you choose to use the HCl compliance alternative	Measure the hydrogen chloride and chlorine emission concentrations	Method 26 or 26A in appendix A to 40 CFR part 60.
(6) Each subpart DDDDD emission point for which you choose to use the TSM compliance alternative	Measure the manganese emission concentration	Method 29 in appendix A to 40 CFR part 60.
(7) Each subpart DDDDD emission point for which you choose to use a compliance alternative	Convert emissions concentration to lb per MMBtu emission rates	Method 19 F-factor methodology in appendix A to part 60 of this chapter.

Table 2 to Appendix A of Subpart DDDDD—Allowable Toxicity-Weighted Emission Rate Expressed in HCl Equivalents (lbs/hr)

	Distance to property boundary (m)											
Stack ht. (m)	**0**	**50**	**100**	**150**	**200**	**250**	**500**	**1000**	**1500**	**2000**	**3000**	**5000**
5	114.9	114.9	114.9	114.9	114.9	114.9	144.3	287.3	373.0	373.0	373.0	373.0

Stack ht. (m)	Distance to property boundary (m)											
	0	50	100	150	200	250	500	1000	1500	2000	3000	5000
10	188.5	188.5	188.5	188.5	188.5	188.5	195.3	328.0	432.5	432.5	432.5	432.5
20	386.1	386.1	386.1	386.1	386.1	386.1	386.1	425.4	580.0	602.7	602.7	602.7
30	396.1	396.1	396.1	396.1	396.1	396.1	396.1	436.3	596.2	690.6	807.8	816.5
40	408.1	408.1	408.1	408.1	408.1	408.1	408.1	448.2	613.3	715.5	832.2	966.0
50	421.4	421.4	421.4	421.4	421.4	421.4	421.4	460.6	631.0	746.3	858.2	1002.8
60	435.5	435.5	435.5	435.5	435.5	435.5	435.5	473.4	649.0	778.6	885.0	1043.4
70	450.2	450.2	450.2	450.2	450.2	450.2	450.2	486.6	667.4	813.8	912.4	1087.4
80	465.5	465.5	465.5	465.5	465.5	465.5	465.5	500.0	685.9	849.8	940.9	1134.8
100	497.5	497.5	497.5	497.5	497.5	497.5	497.5	527.4	723.6	917.1	1001.2	1241.3
200	677.3	677.3	677.3	677.3	677.3	677.3	677.3	682.3	919.8	1167.1	1390.4	1924.6

Table 3 to Appendix A of Subpart DDDDD—Allowable Manganese Emission Rate (lbs/hr)

Stack ht. (m)	Distance to property boundary (m)											
	0	50	100	150	200	250	500	1000	1500	2000	3000	5000
5	0.29	0.29	0.29	0.29	0.29	0.29	0.36	0.72	0.93	0.93	0.93	0.94
10	0.47	0.47	0.47	0.47	0.47	0.47	0.49	0.82	1.08	1.08	1.08	1.08
20	0.97	0.97	0.97	0.97	0.97	0.97	0.97	1.06	1.45	1.51	1.51	1.51
30	0.99	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.49	1.72	2.02	2.04
40	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.12	1.53	1.79	2.08	2.42
50	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.15	1.58	1.87	2.15	2.51
60	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.18	1.62	1.95	2.21	2.61
70	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.22	1.67	2.03	2.28	2.72
80	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.25	1.71	2.12	2.35	2.84
100	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.32	1.81	2.29	2.50	3.10
200	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.71	2.30	2.92	3.48	4.81

[69 FR 55253, Sept. 13, 2004, as amended at 70 FR 76933, Dec. 28, 2005]

Attachment F: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR 60, Subpart IIII]

Source: 71 FR 39172, July 11, 2006, unless otherwise noted.

What This Subpart Covers

§ 60.4200 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (4) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:

(i) 2007 or later, for engines that are not fire pump engines;

(ii) The model year listed in Table 3 to this subpart or later model year, for fire pump engines.

(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:

(i) Manufactured after April 1, 2006, and are not fire pump engines, or

(ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

(3) Owners and operators of any stationary CI ICE that are modified or reconstructed after July 11, 2005 and any person that modifies or reconstructs any stationary CI ICE after July 11, 2005.

(4) The provisions of §60.4208 of this subpart are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005.

(b) The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.

(c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

(d) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89, subpart J and 40 CFR part 94, subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

(e) Owners and operators of facilities with CI ICE that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011]

Emission Standards for Manufacturers

§ 60.4201 What emission standards must I meet for non-emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same model year and maximum engine power.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 through 2010 model year non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(c) Stationary CI internal combustion engine manufacturers must certify their 2011 model year and later non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same maximum engine power.

(d) Stationary CI internal combustion engine manufacturers must certify the following non-emergency stationary CI ICE to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2007 model year through 2012 non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;

(2) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(3) Their 2013 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(e) Stationary CI internal combustion engine manufacturers must certify the following non-emergency stationary CI ICE to the certification emission standards and other requirements for new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.110, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(2) Their 2014 model year and later non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

(f) Notwithstanding the requirements in paragraphs (a) through (c) of this section, stationary non-emergency CI ICE identified in paragraphs (a) and (c) may be certified to the provisions of 40 CFR part 94 or, if Table 1 to 40 CFR 1042.1 identifies 40 CFR part 1042 as being applicable, 40 CFR part 1042, if the engines will be used solely in either or both of the following locations:

(1) Areas of Alaska not accessible by the Federal Aid Highway System (FAHS); and

(2) Marine offshore installations.

(g) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (e) of this section that are applicable to the model year, maximum engine power, and displacement of the reconstructed stationary CI ICE.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011]

§ 60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

(1) For engines with a maximum engine power less than 37 KW (50 HP):

(i) The certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants for model year 2007 engines, and

(ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and table 2 to this subpart, for 2008 model year and later engines.

(2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (b)(1) through (2) of this section.

(1) For 2007 through 2010 model years, the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(2) For 2011 model year and later, the certification emission standards for new nonroad CI engines for engines of the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants.

(c) [Reserved]

(d) Beginning with the model years in table 3 to this subpart, stationary CI internal combustion engine manufacturers must certify their fire pump stationary CI ICE to the emission standards in table 4 to this subpart, for all pollutants, for the same model year and NFPA nameplate power.

(e) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE that are not fire pump engines to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2007 model year through 2012 emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;

(2) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder;

(3) Their 2013 model year emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder; and

(4) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(f) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE to the certification emission standards and other requirements applicable to Tier 3 new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(2) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power less than 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(g) Notwithstanding the requirements in paragraphs (a) through (d) of this section, stationary emergency CI internal combustion engines identified in paragraphs (a) and (c) may be certified to the provisions of 40 CFR part 94 or, if Table 2 to 40 CFR 1042.101 identifies Tier 3 standards as being applicable, the requirements applicable to Tier 3 engines in 40 CFR part 1042, if the engines will be used solely in either or both of the following locations:

(1) Areas of Alaska not accessible by the FAHS; and

(2) Marine offshore installations.

(h) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (f) of this section that are applicable to the model year, maximum engine power and displacement of the reconstructed emergency stationary CI ICE.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37968, June 28, 2011]

§ 60.4203 How long must my engines meet the emission standards if I am a manufacturer of stationary CI internal combustion engines?

Engines manufactured by stationary CI internal combustion engine manufacturers must meet the emission standards as required in §§60.4201 and 60.4202 during the certified emissions life of the engines.

[76 FR 37968, June 28, 2011]

Emission Standards for Owners and Operators

§ 60.4204 What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder must comply with the emission standards in table 1 to this subpart. Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in §60.4201 for their 2007 model year and later stationary CI ICE, as applicable.

(c) Owners and operators of non-emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the following requirements:

(1) For engines installed prior to January 1, 2012, limit the emissions of NO_Xin the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 grams per kilowatt-hour (g/KW-hr) (12.7 grams per horsepower-hr (g/HP-hr)) when maximum engine speed is less than 130 revolutions per minute (rpm);

(ii) $45 \cdot n^{-0.2}$g/KW-hr ($34 \cdot n^{-0.2}$g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012 and before January 1, 2016, limit the emissions of NO_Xin the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $44 \cdot n^{-0.23}$g/KW-hr ($33 \cdot n^{-0.23}$g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) For engines installed on or after January 1, 2016, limit the emissions of NO_Xin the stationary CI internal combustion engine exhaust to the following:

(i) 3.4 g/KW-hr (2.5 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $9.0 \cdot n^{-0.20}$g/KW-hr ($6.7 \cdot n^{-0.20}$g/HP-hr) where n (maximum engine speed) is 130 or more but less than 2,000 rpm; and

(iii) 2.0 g/KW-hr (1.5 g/HP-hr) where maximum engine speed is greater than or equal to 2,000 rpm.

(4) Reduce particulate matter (PM) emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).

(d) Owners and operators of non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the not-to-exceed (NTE) standards as indicated in §60.4212.

(e) Owners and operators of any modified or reconstructed non-emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed non-emergency stationary CI ICE that are specified in paragraphs (a) through (d) of this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37968, June 28, 2011]

§ 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in Table 1 to this subpart. Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

(c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.

(d) Owners and operators of emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in this section.

(1) For engines installed prior to January 1, 2012, limit the emissions of NO_Xin the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $45 \cdot n^{-0.2}$g/KW-hr ($34 \cdot n^{-0.2}$g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/kW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012, limit the emissions of NO_Xin the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $44 \cdot n^{-0.23}$g/KW-hr ($33 \cdot n^{-0.23}$g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).

(e) Owners and operators of emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the NTE standards as indicated in §60.4212.

(f) Owners and operators of any modified or reconstructed emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed CI ICE that are specified in paragraphs (a) through (e) of this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§ 60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§60.4204 and 60.4205 over the entire life of the engine.

[76 FR 37969, June 28, 2011]

Fuel Requirements for Owners and Operators

§ 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

(c) [Reserved]

(d) Beginning June 1, 2012, owners and operators of stationary CI ICE subject to this subpart with a displacement of greater than or equal to 30 liters per cylinder are no longer subject to the requirements of paragraph (a) of this section, and must use fuel that meets a maximum per-gallon sulfur content of 1,000 parts per million (ppm).

(e) Stationary CI ICE that have a national security exemption under §60.4200(d) are also exempt from the fuel requirements in this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

Other Requirements for Owners and Operators

§ 60.4208 What is the deadline for importing or installing stationary CI ICE produced in previous model years?

(a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.

(b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.

(c) After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.

(d) After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.

(e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.

(f) After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 model year non-emergency engines.

(g) After December 31, 2018, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power greater than or equal to 600 KW (804 HP) and less than 2,000 KW (2,680 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that do not meet the applicable requirements for 2017 model year non-emergency engines.

(h) In addition to the requirements specified in §§60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (g) of this section after the dates specified in paragraphs (a) through (g) of this section.

(i) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§ 60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in §60.4211.

(a) If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.

(b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in §60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

Compliance Requirements

§ 60.4210 What are my compliance requirements if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of less than 10 liters per cylinder to the emission standards specified in §60.4201(a) through (c) and §60.4202(a), (b) and (d) using the certification procedures required in 40 CFR part 89, subpart B, or 40 CFR part 1039, subpart C, as applicable, and must test their engines as specified in those parts. For the purposes of this subpart, engines certified to the standards in table 1 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89. For the purposes of this subpart, engines certified to the standards in table 4 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89, except that engines with NFPA nameplate power of less than 37 KW (50 HP) certified to model year 2011 or later standards shall be subject to the same requirements as engines certified to the standards in 40 CFR part 1039.

(b) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder to the emission standards specified in §60.4201(d) and (e) and §60.4202(e) and (f) using the certification procedures required in 40 CFR part 94, subpart C, or 40 CFR part 1042, subpart C, as applicable, and must test their engines as specified in 40 CFR part 94 or 1042, as applicable.

(c) Stationary CI internal combustion engine manufacturers must meet the requirements of 40 CFR 1039.120, 1039.125, 1039.130, and 1039.135, and 40 CFR part 1068 for engines that are certified to the emission standards in 40 CFR part 1039. Stationary CI internal combustion engine manufacturers must meet the corresponding provisions of 40 CFR part 89, 40 CFR part 94 or 40 CFR part 1042 for engines that would be covered by that part if they were nonroad (including marine) engines. Labels on such engines must refer to stationary engines, rather than or in addition to nonroad or marine engines, as appropriate. Stationary CI internal combustion engine manufacturers must label their engines according to paragraphs (c)(1) through (3) of this section.

(1) Stationary CI internal combustion engines manufactured from January 1, 2006 to March 31, 2006 (January 1, 2006 to June 30, 2006 for fire pump engines), other than those that are part of certified engine families under the nonroad CI engine regulations, must be labeled according to 40 CFR 1039.20.

(2) Stationary CI internal combustion engines manufactured from April 1, 2006 to December 31, 2006 (or, for fire pump engines, July 1, 2006 to December 31 of the year preceding the year listed in table 3 to this subpart) must be labeled according to paragraphs (c)(2)(i) through (iii) of this section:

(i) Stationary CI internal combustion engines that are part of certified engine families under the nonroad regulations must meet the labeling requirements for nonroad CI engines, but do not have to meet the labeling requirements in 40 CFR 1039.20.

(ii) Stationary CI internal combustion engines that meet Tier 1 requirements (or requirements for fire pumps) under this subpart, but do not meet the requirements applicable to nonroad CI engines must be labeled according to 40 CFR 1039.20. The engine manufacturer may add language to the label clarifying that the engine meets Tier 1 requirements (or requirements for fire pumps) of this subpart.

(iii) Stationary CI internal combustion engines manufactured after April 1, 2006 that do not meet Tier 1 requirements of this subpart, or fire pumps engines manufactured after July 1, 2006 that do not meet the requirements for fire pumps under this subpart, may not be used in the U.S. If any such engines are manufactured in the U.S. after April 1, 2006 (July 1, 2006 for fire pump engines), they must be exported or must be brought into compliance with the appropriate standards prior to initial operation. The export provisions of 40 CFR 1068.230 would apply to engines for export and the manufacturers must label such engines according to 40 CFR 1068.230.

(3) Stationary CI internal combustion engines manufactured after January 1, 2007 (for fire pump engines, after January 1 of the year listed in table 3 to this subpart, as applicable) must be labeled according to paragraphs (c)(3)(i) through (iii) of this section.

(i) Stationary CI internal combustion engines that meet the requirements of this subpart and the corresponding requirements for nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR parts 89, 94, 1039 or 1042, as appropriate.

(ii) Stationary CI internal combustion engines that meet the requirements of this subpart, but are not certified to the standards applicable to nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR parts 89, 94, 1039 or 1042, as appropriate, but the words “stationary” must be included instead of “nonroad” or “marine” on the label. In addition, such engines must be labeled according to 40 CFR 1039.20.

(iii) Stationary CI internal combustion engines that do not meet the requirements of this subpart must be labeled according to 40 CFR 1068.230 and must be exported under the provisions of 40 CFR 1068.230.

(d) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under 40 CFR parts 89, 94, 1039 or 1042 for that model year may certify any such family that contains both nonroad (including marine) and stationary engines as a single engine family and/or may include any such family containing stationary engines in the averaging, banking and trading provisions applicable for such engines under those parts.

(e) Manufacturers of engine families discussed in paragraph (d) of this section may meet the labeling requirements referred to in paragraph (c) of this section for stationary CI ICE by either adding a separate label containing the information required in paragraph (c) of this section or by adding the words “and stationary” after the word “nonroad” or “marine,” as appropriate, to the label.

(f) Starting with the model years shown in table 5 to this subpart, stationary CI internal combustion engine manufacturers must add a permanent label stating that the engine is for stationary emergency use only to each new emergency stationary CI internal combustion engine greater than or equal to 19 KW (25 HP) that meets all the emission standards for emergency engines in §60.4202 but does not meet all the emission standards for non-emergency engines in §60.4201. The label must be added according to the labeling requirements specified in 40 CFR 1039.135(b). Engine manufacturers must specify in the owner's manual that operation of emergency engines is limited to emergency operations and required maintenance and testing.

(g) Manufacturers of fire pump engines may use the test cycle in table 6 to this subpart for testing fire pump engines and may test at the NFPA certified nameplate HP, provided that the engine is labeled as “Fire Pump Applications Only”.

(h) Engine manufacturers, including importers, may introduce into commerce uncertified engines or engines certified to earlier standards that were manufactured before the new or changed standards took effect until inventories are depleted, as long as such engines are part of normal inventory. For example, if the engine manufacturers' normal industry practice is to keep on hand a one-month supply of engines based on its projected sales, and a new tier of standards starts to apply for the 2009 model year, the engine manufacturer may manufacture engines based on the normal inventory requirements late in the 2008 model year, and sell those engines for installation. The engine manufacturer may not circumvent the provisions of §§60.4201 or 60.4202 by stockpiling engines that are built before new or changed standards take effect. Stockpiling of such engines beyond normal industry practice is a violation of this subpart.

(i) The replacement engine provisions of 40 CFR 89.1003(b)(7), 40 CFR 94.1103(b)(3), 40 CFR 94.1103(b)(4) and 40 CFR 1068.240 are applicable to stationary CI engines replacing existing equipment that is less than 15 years old.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§ 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:

(1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

(2) Change only those emission-related settings that are permitted by the manufacturer; and

(3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

(b) If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in §§60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.

(1) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

(3) Keeping records of engine manufacturer data indicating compliance with the standards.

(4) Keeping records of control device vendor data indicating compliance with the standards.

(5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in §60.4212, as applicable.

(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section.

(d) If you are an owner or operator and must comply with the emission standards specified in §60.4204(c) or §60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section.

(1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in §60.4213.

(2) Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.

(i) Identification of the specific parameters you propose to monitor continuously;

(ii) A discussion of the relationship between these parameters and $NO_X$and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit $NO_X$and PM emissions;

(iii) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(iv) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(3) For non-emergency engines with a displacement of greater than or equal to 30 liters per cylinder, conducting annual performance tests to demonstrate continuous compliance with the emission standards as specified in §60.4213.

(e) If you are an owner or operator of a modified or reconstructed stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(e) or §60.4205(f), you must demonstrate compliance according to one of the methods specified in paragraphs (e)(1) or (2) of this section.

(1) Purchasing, or otherwise owning or operating, an engine certified to the emission standards in §60.4204(e) or §60.4205(f), as applicable.

(2) Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in §60.4212 or §60.4213, as appropriate. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction.

(f) Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.

(g) If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

(1) If you are an owner or operator of a stationary CI internal combustion engine with maximum engine power less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

(2) If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.

(3) If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37970, June 28, 2011]

Testing Requirements for Owners and Operators

§ 60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (e) of this section.

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and according to 40 CFR part 1042, subpart F, for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

(b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.

(c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

$$\text{NTE requirement for each pollutant} = (1.25) \times (\text{STD}) \qquad \text{(Eq. 1)}$$

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate.

(d) Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in §60.4204(a), §60.4205(a), or §60.4205(c), determined from the equation in paragraph (c) of this section.

Where:

STD = The standard specified for that pollutant in §60.4204(a), §60.4205(a), or §60.4205(c).

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) may follow the testing procedures specified in §60.4213, as appropriate.

(e) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1042 must not exceed the NTE standards for the same model year and maximum engine power as required in 40 CFR 1042.101(c).

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

§ 60.4213 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of greater than or equal to 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests according to paragraphs (a) through (f) of this section.

(a) Each performance test must be conducted according to the requirements in §60.8 and under the specific conditions that this subpart specifies in table 7. The test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c).

(c) You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must last at least 1 hour.

(d) To determine compliance with the percent reduction requirement, you must follow the requirements as specified in paragraphs (d)(1) through (3) of this section.

(1) You must use Equation 2 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad \text{(Eq. 2)}$$

Where:

C_i= concentration of NO_Xor PM at the control device inlet,

C_o= concentration of NO_Xor PM at the control device outlet, and

R = percent reduction of NO_Xor PM emissions.

(2) You must normalize the NO_Xor PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen (O_2) using Equation 3 of this section, or an equivalent percent carbon dioxide (CO_2) using the procedures described in paragraph (d)(3) of this section.

$$C_{adj} = C_d \frac{5.9}{20.9 - \%\,O_2} \qquad \text{(Eq. 3)}$$

Where:

C_{adj}= Calculated NO_Xor PM concentration adjusted to 15 percent O_2.

C_d= Measured concentration of NO_Xor PM, uncorrected.

5.9 = 20.9 percent O_2−15 percent O_2, the defined O_2correction value, percent.

$\%O_2$= Measured O_2concentration, dry basis, percent.

(3) If pollutant concentrations are to be corrected to 15 percent $O_2$and CO_2concentration is measured in lieu of O_2concentration measurement, a CO_2correction factor is needed. Calculate the CO_2correction factor as described in paragraphs (d)(3)(i) through (iii) of this section.

(i) Calculate the fuel-specific $F_o$value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209 F_d}{F_c} \qquad \text{(Eq. 4)}$$

Where:

F_o= Fuel factor based on the ratio of O_2volume to the ultimate CO_2volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is O_2, percent/100.

F_d= Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3 /J (dscf/10^6 Btu).

F_c= Ratio of the volume of CO_2produced to the gross calorific value of the fuel from Method 19, dsm^3 /J (dscf/10^6 Btu).

(ii) Calculate the CO_2correction factor for correcting measurement data to 15 percent O_2, as follows:

$$X_{CO_2} = \frac{5.9}{F_o} \qquad \text{(Eq. 5)}$$

Where:

X_{CO2}= CO_2correction factor, percent.

5.9 = 20.9 percent O_2−15 percent O_2, the defined O_2correction value, percent.

(iii) Calculate the $NO_X$and PM gas concentrations adjusted to 15 percent O_2using CO_2as follows:

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \qquad \text{(Eq. 6)}$$

Where:

C_{adj}= Calculated NO_Xor PM concentration adjusted to 15 percent O_2.

C_d= Measured concentration of NO_Xor PM, uncorrected.

$\%CO_2$= Measured CO_2concentration, dry basis, percent.

(e) To determine compliance with the NO_Xmass per unit output emission limitation, convert the concentration of NO_Xin the engine exhaust using Equation 7 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{\text{KW-hour}} \qquad \text{(Eq. 7)}$$

Where:

ER = Emission rate in grams per KW-hour.

C_d= Measured NO_Xconcentration in ppm.

1.912×10^{-3}= Conversion constant for ppm $NO_X$to grams per standard cubic meter at 25 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Brake work of the engine, in KW-hour.

(f) To determine compliance with the PM mass per unit output emission limitation, convert the concentration of PM in the engine exhaust using Equation 8 of this section:

$$ER = \frac{C_{adj} \times Q \times T}{\text{KW-hour}} \qquad \text{(Eq. 8)}$$

Where:

ER = Emission rate in grams per KW-hour.

C_{adj}= Calculated PM concentration in grams per standard cubic meter.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Energy output of the engine, in KW.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

Notification, Reports, and Records for Owners and Operators

§ 60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section.

(1) Submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (a)(1)(i) through (v) of this section.

(i) Name and address of the owner or operator;

(ii) The address of the affected source;

(iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(iv) Emission control equipment; and

(v) Fuel used.

(2) Keep records of the information in paragraphs (a)(2)(i) through (iv) of this section.

(i) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(ii) Maintenance conducted on the engine.

(iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.

(iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

(c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

Special Requirements

§ 60.4215 What requirements must I meet for engines used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands?

(a) Stationary CI ICE with a displacement of less than 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the applicable emission standards in §§60.4202 and 60.4205.

(b) Stationary CI ICE that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are not required to meet the fuel requirements in §60.4207.

(c) Stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the following emission standards:

(1) For engines installed prior to January 1, 2012, limit the emissions of NO_Xin the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $45 \cdot n^{-0.2}$g/KW-hr ($34 \cdot n^{-0.2}$g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012, limit the emissions of NO_Xin the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $44 \cdot n^{-0.23}$g/KW-hr ($33 \cdot n^{-0.23}$g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

§ 60.4216 What requirements must I meet for engines used in Alaska?

(a) Prior to December 1, 2010, owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder located in areas of Alaska not accessible by the FAHS should refer to 40 CFR part 69 to determine the diesel fuel requirements applicable to such engines.

(b) Except as indicated in paragraph (c) of this section, manufacturers, owners and operators of stationary CI ICE with a displacement of less than 10 liters per cylinder located in areas of Alaska not accessible by the FAHS may meet the requirements of this subpart by manufacturing and installing engines meeting the requirements of 40 CFR parts 94 or 1042, as appropriate, rather than the otherwise applicable requirements of 40 CFR parts 89 and 1039, as indicated in sections §§60.4201(f) and 60.4202(g) of this subpart.

(c) Manufacturers, owners and operators of stationary CI ICE that are located in areas of Alaska not accessible by the FAHS may choose to meet the applicable emission standards for emergency engines in §60.4202 and §60.4205, and not those for non-emergency engines in §60.4201 and §60.4204, except that for 2014 model year and later non-emergency CI ICE, the owner or operator of any such engine that was not certified as meeting Tier 4 PM standards, must meet the applicable requirements for PM in §60.4201 and §60.4204 or install a PM emission control device that achieves PM emission reductions of 85 percent, or 60 percent for engines with a displacement of greater than or equal to 30 liters per cylinder, compared to engine-out emissions.

(d) The provisions of §60.4207 do not apply to owners and operators of pre-2014 model year stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS.

(e) The provisions of §60.4208(a) do not apply to owners and operators of stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS until after December 31, 2009.

(f) The provisions of this section and §60.4207 do not prevent owners and operators of stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS from using fuels mixed with used lubricating oil, in volumes of up to 1.75 percent of the total fuel. The sulfur content of the used lubricating oil must be less than 200 parts per million. The used lubricating oil must meet the on-specification levels and properties for used oil in 40 CFR 279.11.

[76 FR 37971, June 28, 2011]

§ 60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?

Owners and operators of stationary CI ICE that do not use diesel fuel may petition the Administrator for approval of alternative emission standards, if they can demonstrate that they use a fuel that is not the fuel on which the manufacturer of the engine certified the engine and that the engine cannot meet the applicable standards required in §60.4204 or §60.4205 using such fuels and that use of such fuel is appropriate and reasonably necessary, considering cost, energy, technical feasibility, human health and environmental, and other factors, for the operation of the engine.

[76 FR 37972, June 28, 2011]

General Provisions

§ 60.4218 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 apply to you.

Definitions

§ 60.4219 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Certified emissions life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for certified emissions life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 94.9(a).

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Date of manufacture means one of the following things:

(1) For freshly manufactured engines and modified engines, date of manufacture means the date the engine is originally produced.

(2) For reconstructed engines, date of manufacture means the date the engine was originally produced, except as specified in paragraph (3) of this definition.

(3) Reconstructed engines are assigned a new date of manufacture if the fixed capital cost of the new and refurbished components exceeds 75 percent of the fixed capital cost of a comparable entirely new facility. An engine that is produced from a previously used engine block does not retain the date of manufacture of the engine in which the engine block was previously used if the engine is produced using all new components except for the engine block. In these cases, the date of manufacture is the date of reconstruction or the date the new engine is produced.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Diesel particulate filter means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.

Emergency stationary internal combustion engine means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

Engine manufacturer means the manufacturer of the engine. See the definition of “manufacturer” in this section.

Fire pump engine means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

Freshly manufactured engine means an engine that has not been placed into service. An engine becomes freshly manufactured when it is originally produced.

Installed means the engine is placed and secured at the location where it is intended to be operated.

Manufacturer has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for sale or resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1039.801.

Model year means the calendar year in which an engine is manufactured (see “date of manufacture”), except as follows:

(1) Model year means the annual new model production period of the engine manufacturer in which an engine is manufactured (see “date of manufacture”), if the annual new model production period is different than the calendar year and includes January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year.

(2) For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was manufactured (see “date of manufacture”).

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Reciprocating internal combustion engine means any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to a gasoline, natural gas, or liquefied petroleum gas fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Subpart means 40 CFR part 60, subpart IIII.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37972, June 28, 2011]

Table 1 to Subpart IIII of Part 60—Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of <10 Liters per Cylinder and 2007–2010 Model Year Engines >2,237 KW (3,000 HP) and With a Displacement of <10 Liters per Cylinder

[As stated in §§60.4201(b), 60.4202(b), 60.4204(a), and 60.4205(a), you must comply with the following emission standards]

Maximum engine power	Emission standards for stationary pre-2007 model year engines with a displacement of <10 liters per cylinder and 2007–2010 model year engines >2,237 KW (3,000 HP) and with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)				
	NMHC + NO_X	HC	NO_X	CO	PM
KW<8 (HP<11)	10.5 (7.8)			8.0 (6.0)	1.0 (0.75)
8≤KW<19 (11≤HP<25)	9.5 (7.1)			6.6 (4.9)	0.80 (0.60)
19≤KW<37 (25≤HP<50)	9.5 (7.1)			5.5 (4.1)	0.80 (0.60)
37≤KW<56 (50≤HP<75)			9.2 (6.9)		
56≤KW<75 (75≤HP<100)			9.2 (6.9)		
75≤KW<130 (100≤HP<175)			9.2 (6.9)		
130≤KW<225 (175≤HP<300)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
225≤KW<450 (300≤HP<600)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
450≤KW≤560 (600≤HP≤750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
KW>560 (HP>750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)

Table 2 to Subpart IIII of Part 60—Emission Standards for 2008 Model Year and Later Emergency Stationary CI ICE <37 KW (50 HP) With a Displacement of <10 Liters per Cylinder

[As stated in §60.4202(a)(1), you must comply with the following emission standards]

Engine power	Emission standards for 2008 model year and later emergency stationary CI ICE <37 KW (50 HP) with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)			
	Model year(s)	NO_X+ NMHC	CO	PM
KW<8 (HP<11)	2008+	7.5 (5.6)	8.0 (6.0)	0.40 (0.30)
8≤KW<19 (11≤HP<25)	2008+	7.5 (5.6)	6.6 (4.9)	0.40 (0.30)
19≤KW<37 (25≤HP<50)	2008+	7.5 (5.6)	5.5 (4.1)	0.30 (0.22)

Table 3 to Subpart IIII of Part 60—Certification Requirements for Stationary Fire Pump Engines

Table 3 to Subpart IIII of Part 60—Certification Requirements for Stationary Fire Pump Engines

As stated in §60.4202(d), you must certify new stationary fire pump engines beginning with the following model years:

Engine power	Starting model year engine manufacturers must certify new stationary fire pump engines according to §60.4202(d)[1]
KW<75 (HP<100)	2011
75≤KW<130 (100≤HP<175)	2010
130≤KW≤560 (175≤HP≤750)	2009
KW>560 (HP>750)	2008

[1]Manufacturers of fire pump stationary CI ICE with a maximum engine power greater than or equal to 37 kW (50 HP) and less than 450 KW (600 HP) and a rated speed of greater than 2,650 revolutions per minute (rpm) are not required to certify such engines until three model years following the model year indicated in this Table 3 for engines in the applicable engine power category.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37972, June 28, 2011]

Table 4 to Subpart IIII of Part 60—Emission Standards for Stationary Fire Pump Engines

[As stated in §§60.4202(d) and 60.4205(c), you must comply with the following emission standards for stationary fire pump engines]

Maximum engine power	Model year(s)	NMHC + NO_X	CO	PM
KW<8 (HP<11)	2010 and earlier	10.5 (7.8)	8.0 (6.0)	1.0 (0.75)
	2011+	7.5 (5.6)		0.40 (0.30)
8≤KW<19 (11≤HP<25)	2010 and earlier	9.5 (7.1)	6.6 (4.9)	0.80 (0.60)
	2011+	7.5 (5.6)		0.40 (0.30)
19≤KW<37 (25≤HP<50)	2010 and earlier	9.5 (7.1)	5.5 (4.1)	0.80 (0.60)
	2011+	7.5 (5.6)		0.30 (0.22)
37≤KW<56 (50≤HP<75)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011+[1]	4.7 (3.5)		0.40 (0.30)
56≤KW<75 (75≤HP<100)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011+[1]	4.7 (3.5)		0.40 (0.30)
75≤KW<130 (100≤HP<175)	2009 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2010+[2]	4.0 (3.0)		0.30 (0.22)
130≤KW<225 (175≤HP<300)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)

Maximum engine power	Model year(s)	NMHC + NO_X	CO	PM
	2009+[3]	4.0 (3.0)		0.20 (0.15)
225≤KW<450 (300≤HP<600)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+[3]	4.0 (3.0)		0.20 (0.15)
450≤KW≤560 (600≤HP≤750)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+	4.0 (3.0)		0.20 (0.15)
KW>560 (HP>750)	2007 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2008+	6.4 (4.8)		0.20 (0.15)

[1]For model years 2011–2013, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines.

[2]For model years 2010–2012, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.

[3]In model years 2009–2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.

Table 5 to Subpart IIII of Part 60—Labeling and Recordkeeping Requirements for New Stationary Emergency Engines

[You must comply with the labeling requirements in §60.4210(f) and the recordkeeping requirements in §60.4214(b) for new emergency stationary CI ICE beginning in the following model years:]

Engine power	Starting model year
19≤KW<56 (25≤HP<75)	2013
56≤KW<130 (75≤HP<175)	2012
KW≥130 (HP≥175)	2011

Table 6 to Subpart IIII of Part 60—Optional 3-Mode Test Cycle for Stationary Fire Pump Engines

[As stated in §60.4210(g), manufacturers of fire pump engines may use the following test cycle for testing fire pump engines:]

Mode No.	Engine speed[1]	Torque (percent)[2]	Weighting factors
1	Rated	100	0.30
2	Rated	75	0.50
3	Rated	50	0.20

[1]Engine speed: ±2 percent of point.

[2]Torque: NFPA certified nameplate HP for 100 percent point. All points should be ±2 percent of engine percent load value.

Table 7 to Subpart IIII of Part 60—Requirements for Performance Tests for Stationary CI ICE With a Displacement of ≥30 Liters per Cylinder

[As stated in §60.4213, you must comply with the following requirements for performance tests for stationary CI ICE with a displacement of ≥30 liters per cylinder:]

For each	Complying with the requirement to	You must	Using	According to the following requirements
1. Stationary CI internal combustion engine with a displacement of ≥30 liters per cylinder	a. Reduce NO_Xemissions by 90 percent or more	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O_2at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O_2concentration must be made at the same time as the measurements for NO_Xconcentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and,	(3) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see §60.17)	(c) Measurements to determine moisture content must be made at the same time as the measurements for NO_Xconcentration.
		iv. Measure NO_Xat the inlet and outlet of the control device	(4) Method 7E of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see §60.17)	(d) NO_Xconcentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	b. Limit the concentration of NO_Xin the stationary CI internal combustion engine exhaust.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) If using a control device, the sampling site must be located at the outlet of the control device.

For each	Complying with the requirement to	You must	Using	According to the following requirements
		ii. Determine the O_2concentration of the stationary internal combustion engine exhaust at the sampling port location; and,	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O_2concentration must be made at the same time as the measurement for NO_Xconcentration.
		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and,	(3) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see §60.17)	(c) Measurements to determine moisture content must be made at the same time as the measurement for NO_Xconcentration.
		iv. Measure NO_Xat the exhaust of the stationary internal combustion engine	(4) Method 7E of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see §60.17)	(d) NO_Xconcentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	c. Reduce PM emissions by 60 percent or more	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O_2at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O_2concentration must be made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and	(3) Method 4 of 40 CFR part 60, appendix A	(c) Measurements to determine and moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the inlet and outlet of the control device	(4) Method 5 of 40 CFR part 60, appendix A	(d) PM concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

For each	Complying with the requirement to	You must	Using	According to the following requirements
	d. Limit the concentration of PM in the stationary CI internal combustion engine exhaust	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2concentration of the stationary internal combustion engine exhaust at the sampling port location; and	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O_2concentration must be made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(3) Method 4 of 40 CFR part 60, appendix A	(c) Measurements to determine moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the exhaust of the stationary internal combustion engine	(4) Method 5 of 40 CFR part 60, appendix A	(d) PM concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

Table 8 to Subpart IIII of Part 60—Applicability of General Provisions to Subpart IIII

[As stated in §60.4218, you must comply with the following applicable General Provisions:]

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§60.1	General applicability of the General Provisions	Yes	
§60.2	Definitions	Yes	Additional terms defined in §60.4219.
§60.3	Units and abbreviations	Yes	
§60.4	Address	Yes	
§60.5	Determination of construction or modification	Yes	
§60.6	Review of plans	Yes	

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§60.7	Notification and Recordkeeping	Yes	Except that §60.7 only applies as specified in §60.4214(a).
§60.8	Performance tests	Yes	Except that §60.8 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder and engines that are not certified.
§60.9	Availability of information	Yes	
§60.10	State Authority	Yes	
§60.11	Compliance with standards and maintenance requirements	No	Requirements are specified in subpart IIII.
§60.12	Circumvention	Yes	
§60.13	Monitoring requirements	Yes	Except that §60.13 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder.
§60.14	Modification	Yes	
§60.15	Reconstruction	Yes	
§60.16	Priority list	Yes	
§60.17	Incorporations by reference	Yes	
§60.18	General control device requirements	No	
§60.19	General notification and reporting requirements	Yes	

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document (TSD)
for a Part 70 Operating Permit Renewal

Source Description and Location

Source Name:	Consolidated Grain and Barge Co.
Source Location:	2781 Bluff Road, Mt. Vernon, Indiana 47620
County:	Posey
SIC Code:	2075
Permit Renewal No.:	T129-31079-00035
Permit Reviewer:	Kimberly Cottrell

Public Notice Information

On July 11, 2012, and December 5, 2012, the Office of Air Quality (OAQ) had notices published in the Mount Vernon Democrat in Mount Vernon, Indiana, stating that the Consolidated Grain and Barge Co. had applied for a renewal of its Part 70 Operating Permit Renewal issued on August 1, 2007. The notices also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Other Changes

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted).

1. On November 3, 2011, the Indiana Air Pollution Control Board issued a revision to 326 IAC 2. The revision resulted in a change to the rule citation of the "responsible official" definition. Therefore, throughout the permit the following citation has been revised as follows:

   326 IAC 2-7-1(~~34~~**35**)

No change will be made to the original TSD. The OAQ prefers that the TSD reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

Source Background and Description

Source Name:	Consolidated Grain and Barge Co.
Source Location:	2781 Bluff Road, Mt. Vernon, Indiana 47620
County:	Posey
SIC Code:	2075
Permit Renewal No.:	T129-31079-00035
Permit Reviewer:	Kimberly Cottrell

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Consolidated Grain and Barge Co. relating to the operation of a stationary soybean oil extraction plant. On October 31, 2011, Consolidated Grain and Barge Co. submitted an application to the OAQ requesting to renew its operating permit. Consolidated Grain and Barge Co. was issued its first Part 70 Operating Permit Renewal T129-21079-00035 on August 1, 2007.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

(a) Three (3) 33.7 million MMBtu per hour natural gas fired boilers, identified as P17, P18, and P18A, approved in 1996 for construction, and exhausting to Stacks 17, 18, and 18A, respectively. Under NSPS, Subpart Dc, boilers P17, P18, and P18A are considered small industrial-commercial-institutional steam generating units. Under NESHAP, Subpart DDDDD, boilers P17, P18, and P18A are considered part of the existing, affected source.

(b) Two (2) wood/shredded tire fired boilers, identified as P17B and P17C, approved in 2006 for construction, each with a nominal heat input capacity of 57.3 MMBtu/hr, both controlled by one (1) electrostatic precipitator (ESP) (identified as ES1), and exhausting through Stack 17A. Stack 17A is equipped with a continuous opacity monitoring system (COMS). Under NSPS, Subpart Dc, boilers P17B and P17C are considered small industrial-commercial-institutional steam generating units. Under NESHAP, Subpart DDDDD, boilers P17B and P17C are considered part of the existing, affected source.

(c) One (1) north truck receiving area, identified as P24, approved in 2001 for construction, with a nominal throughput capacity of 360 tons per hour, controlled by baghouse C24, and exhausting to Stack 24. Under NSPS, Subpart DD, this unit is considered a truck unloading station.

(d) One (1) north house bin loading area, identified as P27, approved in 2001 for construction, with a nominal throughput capacity of 360 tons per hour, and exhausting inside the north house, consisting of the following:

(1) One (1) totally enclosed aspirated elevator leg that transfers soybeans to enclosed conveyors.

(2) Two (2) enclosed conveyors that transfer the soybean from the north receiving area to the soybean storage areas.

Under NSPS, Subpart DD, this area is considered a grain handling operation.

(e) One (1) soybean expander system, approved in 1996 for construction and approved in 2004 for modification, with a nominal capacity of 50 tons per hour. This system consists of the following:

(1) One (1) expander, forming soybean collets.

(2) One (1) totally enclosed conveying system transferring material from the expander system to the extraction system.

Under NESHAP, Subpart GGGG, these emission units are considered vegetable oil production processes.

(f) One (1) truck only soybean receiving area, identified as P1, approved in 1996 for construction, with a nominal throughput capacity of 600 tons per hour. This area consists of the following:

(1) One (1) truck only receiving pit.

(2) One (1) totally enclosed belt conveyor system (or equivalent), using an oil application to control PM emissions.

(3) One (1) aspirated soybean receiving leg, controlled by an oil application to control PM emissions and also controlled by baghouse C1, exhausting to Stack 1.

(4) One (1) enclosed belt conveyor that transfers the soybean from the receiving leg to the soybean enclosed belt conveyor.

(5) One (1) enclosed belt conveyor that loads the soybean storage silos.

Under NSPS, Subpart DD, the emission units at this area are considered a truck unloading station and grain handling operations.

(g) One (1) truck and railcar soybean receiving area, identified as P2, approved in 1996 for construction, with a nominal throughput capacity of 540 tons per hour, consisting of the following:

(1) One (1) truck and railcar receiving pit, with PM emissions controlled by restricting vehicles unloading grain at these stations to hopper-bottom rail cars and trucks with choke unloading applications.

(2) One (1) enclosed drag conveyor system (or equivalent), using an oil application to control PM emissions.

(3) Two (2) aspirated soybean receiving legs, using an oil application to control PM emissions and also controlled by baghouse C1, exhausting to Stack 1.

(4) One (1) aspirated bulkweigher, using and oil application to control PM emissions and also controlled by baghouse C1, exhausting to Stack 1.

(5) One (1) enclosed drag conveyor that transfers the soybean at a nominal rate of 540 tons per hour from the receiving leg to the soybean covered belt conveyor that loads the soybean silos.

Under NSPS, Subpart DD, the emission units at this area are considered truck and railcar unloading stations and grain handling operations.

(h) One (1) annex silo loading operation, identified as P2A, approved in 1996 for construction, with a nominal throughput rate of 1,740 tons per hour, controlled by an oil application system, and consisting of the following:

(1) Twelve (12) concrete soybean silos, each with a nominal storage capacity of 73,053 bushels.

(2) Four (4) concrete soybean storage silos, each with a nominal capacity of 19,375 bushels.

(3) Two (2) concrete soybean storage silos, each with a nominal capacity of 18,801 bushels.

(4) Three (3) totally enclosed drag conveyors (or equivalent) comprising two conveyance systems located below the storage silos that transfer the soybeans from the silos to the elevator legs.

Under NSPS, Subpart DD, this silo loading operation is considered a grain handling operation.

(i) One (1) soybean storage system, identified as P2B, approved in 2002 for construction and approved in 2009 for modification, with a nominal throughput of 600 tons per hour, controlled by an oil application system, and consisting of the following:

(1) Two (2) soybean silos (P2B and P2C), with a nominal combined storage capacity of 1,177,000 bushels.

(2) Two (2) enclosed belt conveyors.

(3) Two (2) enclosed drag conveyors.

Under NSPS, Subpart DD, this soybean storage system is considered a grain handling operation.

(j) One (1) flow coating material kaolin handling operation, identified as P3, approved in 1996 for construction, controlled by baghouse C3, and exhausting to Stack 3. This operation consists of the following:

(1) One (1) flow coating material kaolin receiving bin.

(2) One (1) flow coating material enclosed conveyor system that transfers kaolin to the enclosed mixing screw conveyor, with a nominal throughput rate of 0.417 tons per hour.

(k) One (1) soybean cleaning process, identified as P4, approved in 1996 for construction, with a nominal throughput rate of 115 tons per hour, controlled by baghouse C4, and exhausting to stack C4. This system consists of the following:

(1) Two (2) soybean elevator legs that transfer the soybeans from the drag conveyor to the cleaner, using an oil application to control PM emissions.

(2) One (1) totally enclosed conveyor that transfers the soybeans from the elevator legs to the magnet.

(3) One (1) magnet, using both an oil application and baghouse C4 to control PM emissions.

(4) One (1) cleaning system, consisting of the following:

(A) Two (2) cleaners, controlled by an oil application system and baghouse C4.

(B) Two (2) aspirators, controlled by an oil application system and baghouse C4.

(C) One (1) conveyor transferring beans from the aspirator to the hopper, controlled by an oil application system and baghouse C4.

(D) One (1) hopper, controlled by an oil application system and baghouse C4.

(E) One (1) scale, controlled by an oil application system and baghouse C4.

(F) One (1) breaker, controlled by cyclone C5E, and exhausting to stack 5.

Under NSPS, Subpart DD, this cleaning system is considered a grain handling operation.

(l) One (1) soybean heater with one (1) L-Path totally enclosed drag conveyor, identified as P21, approved in 1996 for construction and approved in 2008 for replacement, with a nominal capacity of 115 tons per hour, and exhausting to Stack 21. Under NESHAP, Subpart GGGG, the soybean heater is considered vegetable oil production processes.

(m) One (1) soybean cracking and dehulling operation, identified as P5, approved in 1996 for construction, with a nominal throughput rate of 115 tons per hour, and consisting of the following:

(1) One (1) enclosed drag conveyor (or equivalent) and one (1) totally enclosed overflow recycle L-Path conveyor (or equivalent) with a totally enclosed surge hopper that transfers soybeans to the jet dryers.

(2) Three (3) jet dryers, each with a nominal capacity of 42 tons per hour, controlled by cyclones C5A, C5B, and C5F, respectively, and exhausting to Stack 5.

(3) Three (3) primary CCD dryers, controlled by cyclones C5C and C5G, and exhausting to Stack 5.

(4) Three (3) secondary CCC coolers, controlled by cyclones C5D and C5H, and exhausting to Stack 5.

(5) Six (6) cracking and dehulling rolls that transfer the hulls through four (4) cyclones (C5C, C5D, C5G, and C5H) to an enclosed conveyor.

(6) One (1) totally enclosed cracking and dehulling drag conveyor (or equivalent) that transfers hulls from cyclones C5A and C5B to the hull grinding system, with a nominal throughput rate of 8.05 tons per hour.

(7) One (1) totally enclosed cracking and dehulling drag conveyor (or equivalent) that transfers hulls and aspirated fines from cyclones C5C, C5D, C5F, C5G, C5H, and the totally enclosed auger (or equivalent) of filter C4 to the hull screener and aspirator, with a nominal throughput rate of 8.05 tons per hour.

(8) One (1) hull screener and aspirator, with a nominal throughput rate of 8.05 tons per hour, controlled by cyclone C5E, and exhausting to Stack 5.

Under NESHAP, Subpart GGGG, these units are considered vegetable oil production processes.

(n) One (1) hull grinding operation, identified as P6, approved in 1996 for construction, with a nominal throughput rate of 8.05 tons per hour, controlled by baghouse C6, and exhausting to Stack 6. This operation is consisting of the following:

(1) Two (2) hull grinders.

(2) One (1) ground hulls cyclone.

(3) One (1) totally enclosed drag conveyor (or equivalent) that transfers hulls from the ground hulls cyclone to the hull hopper.

(o) One (1) hull storage operation, identified as P7, approved in 1996 for construction, with a nominal throughput rate of 15 tons per hour, controlled by baghouse C7, and exhausting to Stack 7. This operation is consisting of the following:

(1) One (1) ground hulls blower that transfers hulls to the Hull storage bins.

(2) Hull storage bins, with a nominal capacity of 39,000 cubic feet.

(3) Two (2) totally enclosed drag conveyor (or equivalent) that transfers hulls to the ground hulls blower.

(4) One (1) ground hulls blower that transfers hulls to the hull hopper.

(p) One (1) hull handling operation, approved in 1996 for construction, with a nominal throughput rate of 15 tons per hour, controlled by baghouse C7A, and exhausting to Stack 7A. This operation is consisting of the following:

(1) One (1) hull hopper that feeds to the pellet mills.

(2) Two (2) hull pellet mills, identified as P7A, approved in 1996 for construction, and P7B, permitted in 2008. Only one (1) pellet mill is capable of operating at any given time.

(q) One (1) hull pellet cooler, identified as P8, approved in 1996 for construction, with a nominal capacity of 15 tons per hour, controlled by cyclone C8, and exhausting to Stack 8.

(r) Pellet storage operation consisting of the following:

(1) Pellet storage bin, identified as P8A, approved in 1996 for construction, with a nominal capacity of 29,000 cubic feet, controlled by baghouse C8A that exhausts to Stack 8A.

(2) Pellet storage building, identified as P8B, approved in 1996 for construction, with a nominal capacity of 70,000 cubic feet, controlled by baghouse C8B that exhausts to Stack 8B.

(3) Only one pellet storage can receive product at any one time.

(s) One (1) soybean flaking operation, identified as P19, approved in 1996 for construction and approved in 2009 and in 2010 for modification, with a nominal throughput rate of 104.9 tons per hour, and consisting of the following:

(1) One (1) totally enclosed drag conveyor (or equivalent) and one (1) totally enclosed overflow recycle L-Path conveyor (or equivalent) with a totally enclosed surge hopper that transfers beans from cracking and dehulling to the flakers.

(2) Ten (10) flakers, controlled by baghouses C19A, C19B, and C19C, exhausting to Stack 19, and/or controlled by baghouse C19D, exhausting to Stack P19D.

(3) Two (2) totally enclosed drag conveyors (or equivalent) in series that transfer soybean flakes and collets from the flakers and the expander system to the feed screw conveyor.

(4) One (1) feed screw conveyor that transfers soybean flakes and collets to the extractor.

Under NESHAP, Subpart GGGG, these units are considered vegetable oil production processes.

(t) One (1) soybean oil extraction system, identified as P13, approved in 1996 for construction, controlled by mineral oil absorber system C13, and exhausting to Stack 13. This system consists of the following:

(1) One (1) soybean oil extractor, with a nominal capacity of 104.9 tons of soybean flakes and collets per hour and 104.9 tons of hexane per hour.

(2) One (1) desolventizer unit, with a nominal capacity of 86.8 tons of spent soybean flakes and collets per hour.

(3) A set of evaporators, with a nominal capacity of 20.7 tons of soybean oil per hour.

(4) A set of condensers and water separator to separate hexane and water, with a nominal capacity of 20.7 tons of soybean oil per hour.

(5) One (1) totally enclosed drag conveyor (or equivalent) that transfers flakes and hexane to the desolventizer at a nominal rate of 86.8 tons per hour and 34.5 tons per hour, respectively.

Under NESHAP, Subpart GGGG, these units are considered vegetable oil production processes.

(u) One (1) DTDC meal dryer section 1, identified as P10, approved in 1996 for construction, with a nominal drying capacity of 83.4 tons of meal per hour, controlled by cyclone C10, and exhausting to Stack 10. Under NESHAP, Subpart GGGG, this unit is considered a vegetable oil production process.

(v) One (1) DTDC meal dryer section 2, identified as P11, approved in 1996 for construction, with a nominal drying capacity of 83.4 tons of meal per hour, controlled by cyclone C11, and exhausting to Stack 11. Under NESHAP, Subpart GGGG, this unit is considered a vegetable oil production process.

(w) One (1) DTDC meal dryer section 3, identified as P12, approved in 2009 for modification, with a nominal capacity of 83.4 tons of meal per hour, controlled by cyclone C12, and exhausting to Stack 12. Under NESHAP, Subpart GGGG, this unit is considered a vegetable oil production process.

(x) One (1) enclosed conveyor transferring meal from the meal dryer section 3 to the meal cooling operation, permitted in 2009. Under NESHAP, Subpart GGGG, this unit is considered a vegetable oil production process.

(y) One (1) meal cooling operation, identified as P12A, approved in 2009 for construction, with a nominal capacity of 83.4 tons of meal per hour, controlled by cyclone C12A, and exhausting to Stack 12A. This operation consists of the following:

(1) Two (2) meal cooler sections, exhausting to the common cyclone C12A and Stack 12A.

(2) One (1) Meal Cooler enclosed drag conveyor (or equivalent) that transfers meal from the Meal Cooler and the C12A Cyclone to the one (1) DTDC enclosed drag conveyor.

(3) One (1) DTDC enclosed drag conveyor (or equivalent) that transfers meal from the Meal Cooler/DTDC and four (4) DTDC cyclones (C10, C11, C12, C12A) to the meal surge bin conveyor.

Under NESHAP, Subpart GGGG, these units are considered vegetable oil production processes.

(z) One (1) meal handling process, identified as P9, approved in 1996 for construction, with a nominal capacity of 83.4 tons of meal per hour, controlled by baghouse C9, and exhausting to Stack 9. This process consists of the following:

(1) One (1) totally enclosed conveyor that transfers the meal to the surge bin or the Screener Feed Drag.

(2) One (1) meal surge bin, with a nominal storage capacity of 19,000 cubic feet, that feeds to the recycle leg.

(3) One (1) elevator leg that transfers the meal to the sizing process.

(4) One (1) Screener Feed Drag totally enclosed drag conveyor that feeds the meal screeners.

(5) Four (4) meal screeners.

(6) One (1) meal screening hopper.

(7) Two (2) meal grinders.

(8) Two (2) meal grinding hoppers.

(9) One (1) totally enclosed drag conveyor (or equivalent) that transfers meal from the grinding hoppers to the meal mixing screw conveyor.

(10) One (1) enclosed meal mixing screw conveyor (or equivalent) that transfers meal to the mixed meal elevator leg.

(11) One (1) mixed meal elevator leg.

(12) One (1) totally enclosed drag conveyor (or equivalent) that transfers meal from the mixed meal elevator leg to the meal storage tanks, load out bins and bulk weigh system.

(aa) One (1) meal storage operation, identified as P20, approved in 1996 for construction, with a nominal throughput rate of 300 tons of meal per hour, controlled by baghouse C20, and exhausting to Stack 20. This operation consists of the following:

(1) Meal storage tanks (capacity 292,000 cubic feet) and loadout bin (capacity 29,000 cubic feet), with a combined nominal storage capacity of 321,000 cubic feet.

(2) One (1) totally enclosed drag conveyor (or equivalent) that transfers soybean meal from the meal storage tanks to the meal elevator leg.

(3) One (1) meal elevator leg that operates at a nominal capacity of 300 tons per hour.

(bb) One (1) truck meal loadout operation, identified as P14, approved in 1996 for construction, with a nominal throughput rate of 383.3 tons of meal per hour, controlled by baghouse C14, and exhausting to Stack 14. This operation consists of the following:

(1) Three (3) totally enclosed drag conveyors (or equivalent) that transfer meal from the meal loadout bins to the truck.

(2) Two (2) truck loadout chutes, with only one chute having flow at any given time.

(cc) One (1) barge/railcar meal loadout operation, identified as P15, approved in 1996 for construction, with a nominal throughput rate of 383.3 tons of meal per hour, controlled by baghouse C15, and exhausting to Stack 15. This operation consists of the following:

(1) One (1) rail and barge loadout scalper with a totally enclosed ball breaker.

(2) One (1) rail and barge bulk weigh system consisting of one (1) upper garner, one (1) weigh hopper, and one (1) lower surge.

(3) One (1) totally enclosed drag conveyor (or equivalent) that transfers meal from the lower surge to rail or barge.

(4) Two (2) rail loadout systems, with only one system operating at a time.

(5) One (1) enclosed conveyor that transfers soybean meal from the lower surge to the barge loadout system.

(6) One (1) barge loadout system.

(dd) Three (3) fixed roof hexane storage tanks.

(1) Two (2) fixed roof hexane storage tanks, approved in 1996 for construction, each with a nominal storage capacity of 14,000 gallons.

(2) One (1) horizontal fixed roof hexane storage tank, approved in 2012 for construction, with a nominal storage capacity of 28,000 gallons.

All hexane tanks are vented to the distillation system and exhausted through to Stack 13 (P13). Under NESHAP, Subpart GGGG, these tanks are considered vegetable oil production processes.

(ee) One (1) fixed roof hexane work tank, approved in 1996 for construction, with a nominal storage capacity of 8,000 gallons. Under NESHAP, Subpart GGGG, this tank is considered a vegetable oil production process.

Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit

IDEM is not aware of any emission units that were constructed and/or are operating without a permit.

Emission Units and Pollution Control Equipment Removed From the Source

IDEM is not aware of any emission units that were removed from the source.

Insignificant Activities

The source also consists of the following insignificant activities:

(a) Degreasing operations that do not exceed 145 gallons per twelve (12) months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]

(b) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

(c) Emergency generators as follows: one (1) natural gas-fired emergency generator, approved in 1997 for construction, with a maximum generating rate of 343 kilowatts. [40 CFR 63, Subpart ZZZZ]

(d) Stationary fire pump engines as follows: two (2) diesel-fired pumps, one (1) approved in 1997 for construction and one (1) approved in 2012 for construction, each with a nominal power output rate of 305 hp. [40 CFR 60, Subpart IIII] [40 CFR 63, Subpart ZZZZ]

Summary of Proposed Modification

New Emission Units

The Office of Air Quality (OAQ) has reviewed an application, submitted by Consolidated Grain and Barge Co. on March 12, 2012, relating to amending the operating permit to include a new hexane storage tank and emergency fire pump engine. The following is a list of the proposed emission units:

(a) One (1) horizontal fixed roof hexane storage tank, approved in 2012 for construction, with a nominal storage capacity of 28,000 gallons, vented to the distillation system and exhausted through to Stack 13 (P13). Under NESHAP, Subpart GGGG, this tank is considered part of the vegetable oil production process.

(d) One (1) stationary diesel-fired fire pump engine, approved in 2012 for construction, with a nominal power output rate of 305 hp. Under NSPS, Subpart IIII, this engine is an affected source. Under NESHAP, Subpart ZZZZ, this engine is considered a new affected source.

Permit Level Determination – Part 70

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency."

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

PTE Before Controls of the Modification		
Pollutant	**Hexane Storage Tank Potential To Emit** (ton/yr)	**Fire Pump Engine Potential To Emit** (ton/yr)
PM	0	<5
PM_{10}	0	<5
$PM_{2.5}$	0	<5
SO_2	0	<10
VOC	<5	<10
CO	0	<25
NO_X	0	<10
HAP Pb	0	<0.2
HAP Hexane	<5	0
Single HAPs	<1	<1
Total HAPs	<2.5	<2.5

Appendix A of this TSD reflects the unrestricted potential emissions of the modification.

These changes do not require a source modification under 326 IAC 2-7-10.5 because the potential to emit before consideration of controls is less than the levels outlined in 326 IAC 2-1.1-3(e)(1).

Existing Approvals

Since the issuance of the first Part 70 Operating Permit Renewal (129-21079-00035) on August 1, 2007, the source has constructed or has been operating under the following additional approvals:

(a) First Minor Source Modification No.: 129-25576-00035, issued on January 14, 2008.

(b) First Minor Permit Modification No.: 129-25601-00035, issued on March 24, 2008.

(c) First Administrative Amendment No.: 129-26154-00035, issued on April 1, 2008.

(d) Second Administrative Amendment No.: 129-26988-00035, issued on October 14, 2008.

(e) First Significant Permit Modification No.: 129-26847-00035, Issued on January 16, 2009.

(f) Third Administrative Amendment No.: 129-27392-00035, issued on January 30, 2009.

(g) First Significant Source Modification No.: 129-27572-00035, issued on August 11, 2009.

(h) Second Significant Permit Modification No.: 129-27609-00035, issued on August 28, 2009.

(i) Second Minor Source Modification No.: 129-28356-00035, issued on September 22, 2009.

(j) Second Minor Permit Modification No.: 129-28372-00035, issued on November 23, 2009.

(k) Fourth Administrative Amendment No.: 129-28599-00035, issued on November 25, 2009.

(l) Fifth Administrative Amendment No.: 129-29354-00035, issued on August 12, 2010.

(m) Third Significant Permit Modification No.: 129-29557-00035, issued on February 17, 2011.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the State Implementation Plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Posey 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 $PM_{2.5}$.

(a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Posey County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
Posey County has been classified as attainment for $PM_{2.5}$. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for $PM_{2.5}$ emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct $PM_{2.5}$ significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct $PM_{2.5}$ and SO_2 emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants
Posey County has been classified as attainment or unclassifiable in Indiana for CO, NO_2, PM_{10}, SO_2, and Pb. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

The source includes a grain elevator which supports the soybean oil extraction plant.

(1) Since this source is classified as a soybean oil extraction plant, it is not considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2 or 326 IAC 2-7. Therefore, fugitive emissions from the soybean oil extraction plant are not counted toward the determination of PSD and Part 70 Permit applicability.

(2) The grain elevator has an applicable New Source Performance Standard that was in effect on August 7, 1980. However, soybean meal and hull do not meet the definition of “grain” as defined in 40 CFR 60.301(a). Therefore, the fugitive emissions from only the grain receiving and handling operations of the grain elevator are counted toward the determination of PSD and Part 70 Permit applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions	
Pollutant	**Tons/year**
CO	>100; <250
NO_x	>250
PM	>250
PM_{10}	>250
$PM_{2.5}$	>250
SO_2	<100
VOC	>250
GHGs as CO_2e	>100,000
HAP Acrolein	<10
HAP Benzene	>10

Unrestricted Potential Emissions	
Pollutant	**Tons/year**
HAP 1,3 Butadiene	<10
HAP Formaldehyde	<10
HAP Hexane	>10
HAP HCl	<10
HAP PAH	>10
HAP Styrene	>10
Total HAP	>25

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

The potential to emit (as defined in 326 IAC 2-7-1(29)) of CO, NO_X, PM, PM_{10}, $PM_{2.5}$, and VOC, is greater than 100 tons per year, each, the potential to emit of single HAPs (benzene, hexane, PAH, and styrene) is greater than ten (10) tons per year, the potential to emit of total HAPs is greater than twenty-five (25) tons per year, and the potential to emit of GHGs is greater than one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per year. Therefore, the source is subject to the provisions of 326 IAC 2-7 and will be issued a Part 70 Operating Permit Renewal.

Actual Emissions

The following table shows the actual emissions as reported by the source. This information reflects the 2008 OAQ emission data.

Pollutant	**Actual Emissions** (tons/year)
CO	19.94
NO_x	76.88
PM	105.47
PM_{10}	30.90
$PM_{2.5}$	8.12
SO_2	24.98
VOC	189.20
HAP Hexane	186.89

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, because the source met the following:

(a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

(b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any new control equipment is considered federally enforceable only after issuance of this Part 70 permit renewal, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/ Emission Unit		Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)									
		CO	NO_X	PM	PM_{10}*	$PM_{2.5}$**	SO_2	VOC	GHGs as CO_2e	Total HAPs	Single HAP
Natural Gas Fired Boilers	P17, P18, & P18A	36.47	43.41	0.82	3.30	3.30	0.26	2.39	++	0.82	0.78 (hex.)
Wood/Tires Boilers	P17B & P17C	83.00	182.60	10.38	17.43	14.53	47.73	7.06	82,780	24.21	7.90 (PAH)
North Truck Receiving	P24	--	--	1.88	1.88	1.88	--	--	--	--	--
Kaolin Handling	P3	--	--	0.45	0.45	0.45	--	--	--	--	--
Soybean Cleaning	P4	--	--	3.57	3.57	3.57	--	--	--	--	--
Soybean Cracking/Dehulling	P5	--	--	96.11	96.11	96.11	--	--	--	--	--
Hull Grinding	P6	--	--	1.31	1.31	1.31	--	--	--	--	--
Hull Storage	P7	--	--	0.75	0.75	0.75	--	--	--	--	--
Hull Handling	P7A & P7B	--	--	0.75	0.75	0.75	--	--	--	--	--
Hull Pellet Cooler	P8	--	--	22.53	22.53	22.53	--	--	--	--	--
Hull Pellet Storage	P8A or P8B	--	--	0.75	0.75	0.75	--	--	--	--	--
Soybean Flaking	P19	--	--	1.71	1.71	1.71	--	--	--	--	--
Meal Handling	P9	--	--	1.13	1.13	1.13	--	--	--	--	--
Meal Storage	P20	--	--	1.13	1.13	1.13	--	--	--	--	--
Truck Meal Loadout	P14	--	--	3.00	3.00	3.00	--	--	--	--	--
Rail/Barge Meal Loadout	P15	--	--	3.00	3.00	3.00	--	--	--	--	--
Soybean Oil Extraction System	P13	--	--	--	--	--	--	39.49	--	314.16	314.16 (hex.)
DTDC Meal Dryer Section 1	P10	--	--	23.60	23.60	23.60	--	75.22	--	1,243	1,243 (hex.)
DTDC Meal Dryer Section 2	P11	--	--	0.56	0.56	0.56	--		--		
DTDC Meal Dryer Section 3	P12	--	--	0.43	0.43	0.43	--		--		
DTDC Meal Cooling Operation	P12A	--	--	0.95	0.95	0.95	--	75.22	--	1,243	1,243 (hex.)
Diesel Fired Fire Pump (Emergency)	NA	1.01	4.71	0.33	0.33	0.33	0.31	0.38	175.66	4.1e-3	1.3e-3 (form.)
Natural Gas Fired Emergency Generator	NA	0.11	0.93	1.1E-2	1.4E-2	1.4E-2	1.7E-4	3.5E-2	41.10	1.8e-2	1.6e-2 (form.)
Natural Gas Fired Heaters	NA	0.16	0.19	3.6e-3	1.4e-2	1.4e-2	1.1e-3	1.0e-2	228.11	3.6e-3	3.4e-3 (hex.)
Fugitive Emissions that are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability											
Truck Receiving	P1	--	--	2.44	2.44	2.44	--	--	--	--	--
Truck and Railcar Receiving	P2	--	--	7.14	7.14	7.14	--	--	--	--	--

Process/ Emission Unit		Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)									
		CO	NO_X	PM	PM_{10}*	$PM_{2.5}$**	SO_2	VOC	GHGs as CO_2e	Total HAPs	Single HAP
Annex Silo Loading	P2A	--	--	12.44	6.94	1.18	--	--	--	--	--
Soybean Handling	P2B	--	--	12.44	6.94	1.18	--	--	--	--	--
North House Bin Loading	P27	--	--	0.99	0.55	0.09	--	--	--	--	--
Total PTE* **		**120.75**	**231.84**	**210.61**	**208.70**	**193.83**	**48.30**	**199.80**	**83,225**	**2,825**	**4.66 (benz.) 2,800 (hex.) 7.90 (PAH)**
Title V Major Source Thresholds		100	100	100	100	100	100	100	100,000 CO_2e	25	10
PSD Major Source Thresholds		250	250	250	250	250	250	250	100,000 CO_2e	NA	NA

*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM_{10}), not particulate matter (PM), is considered as a "regulated air pollutant".
**$PM_{2.5}$ listed is direct $PM_{2.5}$.
***The total PTE is limited to less than 250 tons per year. The table above only lists the fugitive emissions that must be included for Part 70 and PSD Applicability. There are additional sources of fugitive particulate matter that are not counted toward Part 70 and PSD Applicability.
+The emissions from P1 and P2 are limited to a total combined throughput of 1,020,000 tons per 12 months.
++The CO_2e emissions from the boilers are limited by a total equivalent dry wood input limit of 51,875 tons per 12 months.

This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no regulated pollutant is emitted at a rate of 250 tons per year or more, it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1), and the source has not undertaken a physical change or change in the method of operation on or after July 1, 2011, that resulted in an emissions increase of seventy-five thousand (75,000) or more tons of CO_2e per year.

Federal Rule Applicability

(a) **Compliance Assurance Monitoring (CAM)**
Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each existing pollutant-specific emission unit that meets the following criteria:

(1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant; and

(3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each existing emission unit and specified pollutant subject to CAM:

Emission Unit / Pollutant	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
PM Wood/	ESP	Y	>100	<100	100	Y	N

Emission Unit / Pollutant		Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
PM_{10}	Tires Boilers (P17B & P17C)		Y	>100	>100	100	Y	Y
$PM_{2.5}$			Y	>100	>100	100	Y	Y
PM	Soybean Receiving Areas (truck & railcar) (P1 & P2)	BH C1 and Enclosure	Y	<100 (P1) <100 (P2)	<100 (both units)	100	N	N
PM_{10}			Y	<100 (both units)	<100 (both units)	100	N	N
$PM_{2.5}$			Y	<100 (both units)	<100 (both units)	100	N	N
PM	kaolin handling operation (P3)	BH C3	Y	<100	<100	100	N	N
PM_{10}			Y	<100	<100	100	N	N
$PM_{2.5}$			Y	<100	<100	100	N	N
PM	Soybean Cleaning (P4)	BH C4	Y	>100	<100	100	Y	N
PM_{10}			Y	>100	<100	100	Y	N
$PM_{2.5}$			Y	>100	<100	100	Y	N
PM	Soybean Cracking/ Dehulling (P5)	Cyclones C5A-H	Y	>100	<100	100	Y	N
PM_{10}			Y	>100	<100	100	Y	N
$PM_{2.5}$			Y	>100	<100	100	Y	N
PM	Hull Grinding (P6)	C6	Y	>100	<100	100	Y	N
PM_{10}			Y	>100	<100	100	Y	N
$PM_{2.5}$			Y	>100	<100	100	Y	N
PM	hull storage operation (P7)	BH C7	Y	<100	<100	100	N	N
PM_{10}			Y	<100	<100	100	N	N
$PM_{2.5}$			Y	<100	<100	100	N	N
PM	hull handling operation (P7A & P7B)	BH C7A	Y	<100	<100	100	N	N
PM_{10}			Y	<100	<100	100	N	N
$PM_{2.5}$			Y	<100	<100	100	N	N
PM	Hull Pellet Cooler (P8)	Cyclone C8	Y	>100	<100	100	Y	N
PM_{10}			Y	>100	<100	100	Y	N
$PM_{2.5}$			Y	>100	<100	100	Y	N
PM	Pellet storage bins (P8A)	BH C8A or BH C8B	Y	<100	<100	100	N	N
PM_{10}			Y	<100	<100	100	N	N
$PM_{2.5}$			Y	<100	<100	100	N	N
PM	Meal Handling (P9)	BH C9	Y	>100	<100	100	Y	N
PM_{10}			Y	>100	<100	100	Y	N
$PM_{2.5}$			Y	>100	<100	100	Y	N
PM	Truck Meal Loadout (P14)	BH C14	Y	>100	<100	100	Y	N
PM_{10}			Y	>100	<100	100	Y	N
$PM_{2.5}$			Y	>100	<100	100	Y	N
PM	Rail/Barge Meal Loadout	BH C15	Y	>100	<100	100	Y	N
PM_{10}			Y	>100	<100	100	Y	N
$PM_{2.5}$			Y	>100	<100	100	Y	N

Emission Unit / Pollutant		Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
	(P15)							
PM	Soybean Flaking (P19)	BHs C19A-C +/- C19D	Y	>100	<100	100	Y	N
PM_{10}			Y	>100	<100	100	Y	N
$PM_{2.5}$			Y	>100	<100	100	Y	N
PM	Meal Storage (P20)	BH C20	Y	>100	<100	100	Y	N
PM_{10}			Y	>100	<100	100	Y	N
$PM_{2.5}$			Y	>100	<100	100	Y	N
PM	North Truck Receiving (P24)	BH C24	Y	>100	<100	100	Y	N
PM_{10}			Y	>100	<100	100	Y	N
$PM_{2.5}$			Y	>100	<100	100	Y	N
VOC	Soybean Extraction System (P13)	Mineral Oil Absorber	Y	>100	<100	100	Y	N
Hex.			Y	>10	>10	10	Y	Y
PM	DTDC Meal Dryer Sections 1, 2, &3 (P10, P11, & P12)	Cyclones C10, C11, & C11A	Y	<100 (each)	<100 (each)	100	N	N
PM_{10}			Y	<100 (each)	<100 (each)	100	N	N
$PM_{2.5}$			Y	<100 (each)	<100 (each)	100	N	N
VOC	DTDC Meal Dryer Sections 1, 2, &3 (P10, P11, & P12)	none	Y	>100 (each)	<100 (all sections)	100	N	N
Hex.			Y	>10 (each)	>10 (all sections)	10	N	N
PM	DTDC Meal Cooling (P12A)	Cyclone C12A	Y	<100	<100	100	N	N
PM_{10}			Y	<100	<100	100	N	N
$PM_{2.5}$			Y	<100	<100	100	N	N
VOC	DTDC Meal Cooling (P12A)	none	Y	>100	<100	100	N	N
Hex.			Y	>10	>10	10	N	N

Based on this evaluation, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring (CAM) are applicable to the Wood/ Tires Boilers (P17B & P17C), Soybean Cleaning (P4), Soybean Cracking/ Dehulling (P5), Hull Grinding (P6), Hull Pellet Cooler (P8), Meal Handling (P9), Truck Meal Loadout (P14), Rail/Barge Meal Loadout (P15), Soybean Flaking (P19), Meal Storage (P20), and North Truck Receiving (P24), for PM, PM_{10}, and $PM_{2.5}$, and the Soybean Extraction System (P13) for VOC. A CAM plan has been submitted and the Compliance Determination and Monitoring Requirements section includes a detailed description of the CAM requirements.

The Soybean Extraction System (P13) is subject to NESHAP, 40 CFR 63, Subpart GGGG, which was proposed after November 15, 1990. Therefore, the n-Hexane emissions are exempt from the requirements of 40 CFR Part 64, Compliance Assurance Monitoring. The VOC emissions from the DTDC Meal Dryers & Cooler for the purpose of CAM do not include n-Hexane, but do include i-Hexane and any other HAPs. There is no control device for the DTDC Meal Dryers & Cooler for VOC; therefore, CAM does not apply.

(b) **New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60)**

The following rules are still applicable to this source:

(1) **Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units [40 CFR 60, Subpart Dc]**
The boilers (P17, P18, and P18A, P17B, and P17C) are still subject to the Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR 60, Subpart Dc), which is incorporated by reference as 326 IAC 12. Boilers (P17, P18, and P18A, P17B, and P17C) are steam generating units for which construction, modification, or reconstruction commenced after June 9, 1989 and that have a maximum design heat input capacities of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).

(a) Three (3) 33.7 million MMBtu per hour natural gas fired boilers, identified as P17, P18, and P18A, approved in 1996 for construction, and exhausting to Stacks 17, 18, and 18A, respectively.

(b) Two (2) wood/shredded tire fired boilers, identified as P17B and P17C, approved in 2006 for construction, each with a nominal heat input capacity of 57.3 MMBtu/hr, both controlled by one (1) electrostatic precipitator (ESP) (identified as ES1), and exhausting through Stack 17A. Stack 17A is equipped with a continuous opacity monitoring system (COMS).

The three (3) natural gas fired boilers (P17, P18, and P18A) are subject to the following portions of 40 CFR 60, Subpart Dc:

(A) 40 CFR 60.40c;
(B) 40 CFR 60.41c;
(C) 40 CFR 60.43c(b), (c), (d), (e)(1), (e)(2), (e)(3);
(D) 40 CFR 60.45c(a), (b), (c);
(E) 40 CFR 60.47c(a), (b), (d), (e), (g); and
(F) 40 CFR 60.48c(a), (c), (g), (h), (i), (j).

The wood/shredded tire boilers (P17B and P17C) are subject to the following portions of 40 CFR 60, Subpart Dc:

(1) 40 CFR 60.40c(a)
(2) 40 CFR 60.40c(b)
(3) 40 CFR 60.40c(c)
(4) 40 CFR 60.41c
(5) 40 CFR 60.43c(c)
(6) 40 CFR 60.43c(d)
(7) 40 CFR 60.43c(e)
(8) 40 CFR 60.45c(a)
(9) 40 CFR 60.47c(a)

(10) 40 CFR 60.47c(b)
(11) 40 CFR 60.48c(a)(1)
(12) 40 CFR 60.48c(a)(3)
(13) 40 CFR 60.48c(c)
(14) 40 CFR 60.48c(g)
(15) 40 CFR 60.48c(i)
(16) 40 CFR 60.48c(j)

The provisions of 40 CFR 60 Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR 60, Subpart Dc.

(2) **Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 [40 CFR 60, Subpart Kb]**

(A) The two (2) fixed roof hexane storage tanks, approved in 1996 for construction, were constructed after July 23, 1984; however, the storage capacity of each tank is less than 75 cubic meters. Therefore NSPS Kb is not applicable to these tanks.

(B) The one (1) horizontal fixed roof hexane storage tank will be constructed after July 23, 1984, and the storage capacity of this tank is greater than 75 cubic meters and less than 151 cubic meters. The maximum true vapor pressure of hexane is greater than 15.0 kPa. NSPS Kb would be applicable to this tank; however, pursuant to 60.110b(d)(8), this tank is not subject to NSPS Kb because it is part of the vegetable oil production process that is subject to 40 CFR 63, Subpart GGGG.

(C) The one (1) fixed roof hexane work tank was constructed after July 23, 1984; however, the storage capacity of this tank is less than 75 cubic meters. Therefore NSPS Kb is not applicable to this tank.

(D) Therefore, the requirements of the NSPS are not included in the permit.

(3) **Standards of Performance for Grain Elevators [40 CFR 60, Subpart DD]**
This grain elevator is still subject to the Standards of Performance for Grain Elevators (40 CFR 60, Subpart DD), which is incorporated by reference as 326 IAC 12, because it is a plant or installation at which grain is unloaded, handled, cleaned, dried, stored, or loaded, that was constructed after August 3, 1978, and has a grain terminal elevator with a permanent storage capacity greater than 1 million bushels. The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations. Soybean meal and hull do not meet the definition of “grain” in 40 CFR 60.301(a). Therefore, this NSPS does not apply to the meal and hull processing operations.

The following grain receiving and handling operations at this source are subject to the requirements of 40 CFR 60, Subpart DD.

(c) One (1) north truck receiving area, identified as P24, permitted in 2001, with a nominal throughput capacity of 360 tons per hour, controlled by baghouse C24, and exhausting to Stack 24. Under NSPS, Subpart DD, this unit is considered a truck unloading station.

(d) One (1) north house bin loading area, identified as P27, approved in 2001 for construction, with a nominal throughput capacity of 360 tons per hour, and exhausting inside the north house, consisting of the following:

(1) One (1) totally enclosed aspirated elevator leg that transfers soybeans to enclosed conveyors.

(2) Two (2) enclosed conveyors that transfer the soybean from the north receiving area to the soybean storage areas.

Under NSPS, Subpart DD, this area is considered a grain handling operation.

(f) One (1) truck only soybean receiving area, identified as P1, approved in 1996 for construction, with a nominal throughput capacity of 600 tons per hour. This area consists of the following:

(1) One (1) truck only receiving pit.

(2) One (1) totally enclosed belt conveyor system (or equivalent), using an oil application to control PM emissions.

(3) One (1) aspirated soybean receiving leg, controlled by an oil application to control PM emissions and also controlled by baghouse C1, exhausting to Stack 1.

(4) One (1) enclosed belt conveyor that transfers the soybean from the receiving leg to the soybean enclosed belt conveyor.

(5) One (1) enclosed belt conveyor that loads the soybean storage silos.

Under NSPS, Subpart DD, the emission units at this area are considered a truck unloading station and grain handling operations.

(g) One (1) truck and railcar soybean receiving area, identified as P2, approved in 1996 for construction, with a nominal throughput capacity of 540 tons per hour, consisting of the following:

(1) One (1) truck and railcar receiving pit, with PM emissions controlled by restricting vehicles unloading grain at these stations to hopper-bottom rail cars and trucks with choke unloading applications.

(2) One (1) enclosed drag conveyor system (or equivalent), using an oil application to control PM emissions.

(3) Two (2) aspirated soybean receiving legs, using an oil application to control PM emissions and also controlled by baghouse C1, exhausting to Stack 1.

(4) One (1) aspirated bulkweigher, using and oil application to control PM emissions and also controlled by baghouse C1, exhausting to Stack 1.

(5) One (1) enclosed drag conveyor that transfers the soybean at a nominal rate of 540 tons per hour from the receiving leg to the soybean covered belt conveyor that loads the soybean silos.

Under NSPS, Subpart DD, the emission units at this area are considered truck and railcar unloading stations and grain handling operations.

(h) One (1) annex silo loading operation, identified as P2A, approved in 1996 for construction, with a nominal throughput rate of 1,740 tons per hour, controlled by an oil application system, and consisting of the following:

(1) Twelve (12) concrete soybean silos, each with a nominal storage capacity of 73,053 bushels.

(2) Four (4) concrete soybean storage silos, each with a nominal capacity of 19,375 bushels.

(3) Two (2) concrete soybean storage silos, each with a nominal capacity of 18,801 bushels.

(4) Three (3) totally enclosed drag conveyors (or equivalent) comprising two conveyance systems located below the storage silos that transfer the soybeans from the silos to the elevator legs.

Under NSPS, Subpart DD, this silo loading operation is considered a grain handling operation.

(i) One (1) soybean storage system, identified as P2B, approved in 2002 for construction and approved in 2009 for modification, with a nominal throughput of 600 tons per hour, controlled by an oil application system, and consisting of the following:

(1) Two (2) soybean silos (P2B and P2C), with a nominal combined storage capacity of 1,177,000 bushels.

(2) Two (2) enclosed belt conveyors.

(3) Two (2) enclosed drag conveyors.

Under NSPS, Subpart DD, this soybean storage system is considered a grain handling operation.

(k) One (1) soybean cleaning process, identified as P4, approved in 1996 for construction, with a nominal throughput rate of 115 tons per hour, controlled by baghouse C4, and exhausting to stack C4. This system consists of the following:

(1) Two (2) soybean elevator legs that transfer the soybeans from the drag conveyor to the cleaner, using an oil application to control PM emissions.

(2) One (1) totally enclosed conveyor that transfers the soybeans from the elevator legs to the magnet.

(3) One (1) magnet, using both an oil application and baghouse C4 to control PM emissions.

(4) One (1) cleaning system, consisting of the following:

(A) Two (2) cleaners, controlled by an oil application system and baghouse C4.

(B) Two (2) aspirators, controlled by an oil application system and baghouse C4.

(C) One (1) conveyor transferring beans from the aspirator to the hopper, controlled by an oil application system and baghouse C4.

(D) One (1) hopper, controlled by an oil application system and baghouse C4.

(E) One (1) scale, controlled by an oil application system and baghouse C4.

(F) One (1) breaker, controlled by cyclone C5E, and exhausting to stack 5.

Under NSPS, Subpart DD, this cleaning system is considered a grain handling operation.

These emission units are subject to the following portions of Subpart DD:

(A) 40 CFR 60.300
(B) 40 CFR 60.301
(C) 40 CFR 60.302(b), (c), (c)(1), (c)(2), (c)(3)
(D) 40 CFR 60.303
(E) 40 CFR 60.304.

The provisions of 40 CFR 60 Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR 60, Subpart DD.

(4) **Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR 60, Subpart IIII]**

(A) The existing fire pump engine is not subject to the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60, Subpart IIII)), which is incorporated by reference as 326 IAC 12, because they were constructed before July 11, 2005. Therefore, the requirements of the NSPS are not included in the permit.

(B) The new fire pump engine is subject to the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60, Subpart IIII), which is incorporated by reference as 326 IAC 12. The

new fire pump engine was constructed after July 11, 2005, and has a displacement less than 30 liters per cylinder.

One (1) stationary diesel-fired fire pump engine, approved in 2012 for construction, with a nominal power output rate of 305 hp. Under NSPS, Subpart IIII, this engine is an affected source.

The new fire pump engine is subject to the following portions of 40 CFR 60, Subpart IIII:

(1) 40 CFR 60.4200(a)(2)(ii) and (a)(4)
(2) 40 CFR 60.4205(c) and (e)
(3) 40 CFR 60.4206
(4) 40 CFR 60.4207(b)
(5) 40 CFR 60.4208
(6) 40 CFR 60.4209, (a)
(7) 40 CFR 60.4211(a), (c), (f), and (g)(2)
(8) 40 CFR 60.4212, (a), (b), (c), and (e)
(9) 40 CFR 60.4214(b)
(10) 40 CFR 60.4218
(11) 40 CFR 60.4219
(12) Table 4 to 40 CFR 60, Subpart IIII
(13) Table 5 to 40 CFR 60, Subpart IIII
(14) Table 8 to 40 CFR 60, Subpart IIII

The provisions of 40 CFR 60 Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in Table 8 to 40 CFR 60, Subpart IIII.

(5) **Standards of Performance for Stationary Spark Ignition Internal Combustion Engines [40 CFR 60, Subpart JJJJ]**
The emergency generator is not subject to the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (40 CFR 60, Subpart JJJJ) because it was constructed before June 12, 2006. Therefore, the requirements of the NSPS are not included in the permit.

(c) **National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 40 CFR Part 61, 326 IAC 20 and 40 CFR Part 63)**

(1) **National Emission Standards for Hazardous Air Pollutants for Halogenated Solvent Cleaning [40 CFR Part 63, Subpart T]**
The solvents used in the degreasing operations (insignificant activities) do not contain any halogenated HAP as defined in 40 CFR 63.460. Therefore, the National Emission Standards for Hazardous Air Pollutants for Halogenated Solvent Cleaning (40 CFR Part 63, Subpart T) are not included in this permit.

(2) **National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production [40 CFR 63, Subpart GGGG]**
This source is still subject to the National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production (40 CFR Part 63, Subpart GGGG), which is incorporated by reference as 326 IAC 20-60, because it is a vegetable oil production process that is also a major source of HAP emissions.

The emission units subject to this rule include the following:

(e) One (1) soybean expander system, approved in 1996 for construction and approved in 2004 for modification, with a nominal capacity of 50 tons per hour. This system consists of the following:

(1) One (1) expander, forming soybean collets.

(2) One (1) totally enclosed conveying system transferring material from the expander system to the extraction system.

Under NESHAP, Subpart GGGG, these emission units are considered vegetable oil production processes.

(l) One (1) soybean heater with one (1) L-Path totally enclosed drag conveyor, identified as P21, approved in 1996 for construction and approved in 2008 for replacement, with a nominal capacity of 115 tons per hour, and exhausting to Stack 21. Under NESHAP, Subpart GGGG, the soybean heater is considered vegetable oil production processes.

(m) One (1) soybean cracking and dehulling operation, identified as P5, approved in 1996 for construction, with a nominal throughput rate of 115 tons per hour, and consisting of the following:

(1) One (1) enclosed drag conveyor (or equivalent) and one (1) totally enclosed overflow recycle L-Path conveyor (or equivalent) with a totally enclosed surge hopper that transfers soybeans to the jet dryers.

(2) Three (3) jet dryers, each with a nominal capacity of 42 tons per hour, controlled by cyclones C5A, C5B, and C5F, respectively, and exhausting to Stack 5.

(3) Three (3) primary CCD dryers, controlled by cyclones C5C and C5G, and exhausting to Stack 5.

(4) Three (3) secondary CCC coolers, controlled by cyclones C5D and C5H, and exhausting to Stack 5.

(5) Six (6) cracking and dehulling rolls that transfer the hulls through four (4) cyclones (C5C, C5D, C5G, and C5H) to an enclosed conveyor.

(6) One (1) totally enclosed cracking and dehulling drag conveyor (or equivalent) that transfers hulls from cyclones C5A and C5B to the hull grinding system, with a nominal throughput rate of 8.05 tons per hour.

(7) One (1) totally enclosed cracking and dehulling drag conveyor (or equivalent) that transfers hulls and aspirated fines from cyclones C5C, C5D, C5F, C5G, C5H, and the totally enclosed auger (or equivalent) of filter C4 to the hull screener and aspirator, with a nominal throughput rate of 8.05 tons per hour.

(8) One (1) hull screener and aspirator, with a nominal throughput rate of 8.05 tons per hour, controlled by cyclone C5E, and exhausting to Stack 5.

Under NESHAP, Subpart GGGG, these units are considered vegetable oil production processes.

(s) One (1) soybean flaking operation, identified as P19, approved in 1996 for construction and approved in 2009 and in 2010 for modification, with a nominal throughput rate of 104.9 tons per hour, and consisting of the following:

(1) One (1) totally enclosed drag conveyor (or equivalent) and one (1) totally enclosed overflow recycle L-Path conveyor (or equivalent) with a totally enclosed surge hopper that transfers beans from cracking and dehulling to the flakers.

(2) Ten (10) flakers, controlled by baghouses C19A, C19B, and C19C, exhausting to Stack 19, and/or controlled by baghouse C19D, exhausting to Stack P19D.

(3) Two (2) totally enclosed drag conveyors (or equivalent) in series that transfer soybean flakes and collets from the flakers and the expander system to the feed screw conveyor.

(4) One (1) feed screw conveyor that transfers soybean flakes and collets to the extractor.

Under NESHAP, Subpart GGGG, these units are considered vegetable oil production processes.

(t) One (1) soybean oil extraction system, identified as P13, approved in 1996 for construction, controlled by mineral oil absorber system C13, and exhausting to Stack 13. This system consists of the following:

(1) One (1) soybean oil extractor, with a nominal capacity of 104.9 tons of soybean flakes and collets per hour and 104.9 tons of hexane per hour.

(2) One (1) desolventizer unit, with a nominal capacity of 86.8 tons of spent soybean flakes and collets per hour.

(3) A set of evaporators, with a nominal capacity of 20.7 tons of soybean oil per hour.

(4) A set of condensers and water separator to separate hexane and water, with a nominal capacity of 20.7 tons of soybean oil per hour.

(5) One (1) totally enclosed drag conveyor (or equivalent) that transfers flakes and hexane to the desolventizer at a nominal rate of 86.8 tons per hour and 34.5 tons per hour, respectively.

Under NESHAP, Subpart GGGG, these units are considered vegetable oil production processes.

(u) One (1) DTDC meal dryer section 1, identified as P10, approved in 1996 for construction, with a nominal drying capacity of 83.4 tons of meal per hour, controlled by cyclone C10, and exhausting to Stack 10. Under NESHAP, Subpart GGGG, this unit is considered a vegetable oil production process.

(v) One (1) DTDC meal dryer section 2, identified as P11, approved in 1996 for construction, with a nominal drying capacity of 83.4 tons of meal per hour, controlled by cyclone C11, and exhausting to Stack 11. Under NESHAP, Subpart GGGG, this unit is considered a vegetable oil production process.

(w) One (1) DTDC meal dryer section 3, identified as P12, approved in 2009 for modification, with a nominal capacity of 83.4 tons of meal per hour, controlled by cyclone C12, and exhausting to Stack 12.

(x) One (1) enclosed conveyor transferring meal from the meal dryer section 3 to the meal cooling operation, approved in 2009 for construction.

(y) One (1) meal cooling operation, identified as P12A, approved in 2009 for construction, with a nominal capacity of 83.4 tons of meal per hour, controlled by cyclone C12A, and exhausting to Stack 12A. This operation consists of the following:

(1) Two (2) meal cooler sections, exhausting to the common cyclone C12A and Stack 12A.

(2) One (1) Meal Cooler enclosed drag conveyor (or equivalent) that transfers meal from the Meal Cooler and the C12A Cyclone to the one (1) DTDC enclosed drag conveyor.

(3) One (1) DTDC enclosed drag conveyor (or equivalent) that transfers meal from the Meal Cooler/DTDC and four (4) DTDC cyclones (C10, C11, C12, C12A) to the meal surge bin conveyor.

Under NESHAP, Subpart GGGG, these units are considered vegetable oil production processes.

(dd) Three (3) fixed roof hexane storage tanks.

(1) Two (2) fixed roof hexane storage tanks, approved in 1996 for construction, each with a nominal storage capacity of 14,000 gallons.

(2) One (1) horizontal fixed roof hexane storage tank, approved in 2012 for construction, with a nominal storage capacity of 28,000 gallons.

All hexane tanks are vented to the distillation system and exhausted through to Stack 13 (P13). Under NESHAP, Subpart GGGG, these tanks are considered vegetable oil production processes.

(ee) One (1) fixed roof hexane work tank, approved in 1996 for construction, with a nominal storage capacity of 8,000 gallons. Under NESHAP, Subpart GGGG, this tank is considered a vegetable oil production process.

These emission units are subject to the following portions of Subpart GGGG.

(A) 40 CFR 63.2830;
(B) 40 CFR 63.2831;
(C) 40 CFR 63.2832(a);
(D) 40 CFR 63.2833;
(E) 40 CFR 63.2834(a);
(F) 40 CFR 63.2840 all except (e);
(G) 40 CFR 63.2850(a), (b), (d), (e)(1)(i), (e)(1)(iii), (e)(2);
(H) 40 CFR 63.2851;
(I) 40 CFR 63.2852;
(J) 40 CFR 63.2853;
(K) 40 CFR 63.2854;
(L) 40 CFR 63.2855;
(M) 40 CFR 63.2860;
(N) 40 CFR 63.2861;
(O) 40 CFR 63.2862;
(P) 40 CFR 63.2863;
(Q) 40 CFR 63.2870;
(R) 40 CFR 63.2871; and
(S) 40 CFR 63.2872.

The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63, Subpart GGGG.

NOTE: The hexane storage tank is subject to NESHAP GGGG. This rule is a newly applicable requirement for the hexane storage tank. The requirements for NESHAP GGGG are already incorporated in the permit, and the affected source for this rule is defined as the collection of equipment that is used to produce vegetable oil.

(3) **National Emission Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines [40 CFR 63, Subpart ZZZZ]**
The emergency generator and fire pump engines are still subject to the National Emission Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63, Subpart ZZZZ), which is incorporated by reference as 326 IAC 20-82, because they are stationary reciprocating internal combustion engines (RICE), and they are not specifically exempted from the requirements of this rule.

The emission units subject to this rule include the following:

(c) Emergency generators, including one (1) natural gas-fired emergency generator, approved in 1997 for construction, with a maximum generating rate of 343 kilowatts. Under NESHAP, Subpart ZZZZ, this engine is considered an existing affected source.

(d) Stationary fire pump engines, including two (2) diesel-fired pumps, one (1) approved in 1997 for construction and one (1) approved in 2012 for construction, each with a nominal power output rate of 305 hp. Under NESHAP, Subpart ZZZZ, this engine is considered a new affected source.

The emergency generator and fire pump engines are subject to the following portions of Subpart ZZZZ.

(A) 40 CFR 63.6580;
(B) 40 CFR 63.6585(a), (b);
(C) 40 CFR 63.6590(a)(1)(ii);
(D) 40 CFR 63.6595(a)(1), (c);
(E) 40 CFR 63.6602;
(F) 40 CFR 63.6605;
(G) 40 CFR 63.6612;
(H) 40 CFR 63.6620;
(I) 40 CFR 63.6625(e), (f), (h), (i), (j);
(J) 40 CFR 63.6635;
(K) 40 CFR 63.6640(a), (b), (f)(1);
(L) 40 CFR 63.6645(a)(5);
(M) 40 CFR 63.6650(a), (b), (c)(1) through (c)(5), (d), (f);
(N) 40 CFR 63.6655(a), (d), (e)(2);
(O) 40 CFR 63.6660;
(P) 40 CFR 63.6665;
(Q) 40 CFR 63.6670;
(R) 40 CFR 63.6675;
(S) Table 2c to 40 CFR 63 Subpart ZZZZ;
(T) Table 4 to 40 CFR 63 Subpart ZZZZ;
(U) Table 6 to 40 CFR 63 Subpart ZZZZ; and
(V) Table 7 to 40 CFR 63 Subpart ZZZZ.

The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 Subpart ZZZZ.

NOTE: The list of applicable requirements has been updated based on revisions promulgated for this rule.

NOTE: The fire pump engine is subject to NESHAP ZZZZ. This rule is a newly applicable requirement for the fire pump engine. The requirements for NESHAP ZZZZ are already incorporated in the permit, and this rule defines the affected sources individually.

(4) **National Emission Standards for Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR 63, Subpart DDDDD]**

(A) The natural gas fired boilers (P17, P18, and P18A) are subject to the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR 63, Subpart DDDDD), which is incorporated by reference as 326 IAC 20-95, because they comprise the collection at a major source of all existing industrial, commercial, and institutional boilers and process heaters within the *Large gaseous fuel subcategory* as defined in 40 CFR 63.7575.

The emission units subject to this rule include the following:

(a) Three (3) 33.7 million MMBtu per hour natural gas fired boilers, identified as P17, P18, and P18A, approved in 1996 for construction, and exhausting to Stacks 17, 18, and 18A, respectively.

The natural gas fired boilers (P17, P18, and P18A) are subject to the following portions of Subpart DDDDD.

(1) 40 CFR 63.7480
(2) 40 CFR 63.7485
(3) 40 CFR 63.7490
(4) 40 CFR 63.7495(b) and (d)
(5) 40 CFR 63.7499
(6) 40 CFR 63.7505(b)
(7) 40 CFR 63.7510(a), (c), and (d)
(8) 40 CFR 63.7515
(9) 40 CFR 63.7520(a), (b), (d), (e), (f), and (g)
(10) 40 CFR 63.7545(a) and (b)
(11) 40 CFR 63.7550 (a-f)
(12) 40 CFR 63.7555(a), (a)(1), and (a)(2)
(13) 40 CFR 63.7560
(14) 40 CFR 63.7565
(15) 40 CFR 63.7570
(16) Table 10 to 40 CFR 63, Subpart DDDDD

The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63, Subpart DDDDD.

(B) The wood/shredded tire fired boilers (P17B and P17C) are subject to the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR 63, Subpart DDDDD), which is incorporated by reference as 326 IAC 20-95, because they comprise the collection at a major source of all existing industrial, commercial, and institutional boilers and process heaters within the *Large solid fuel subcategory* as defined in 40 CFR 63.7575.

The emission units subject to this rule include the following:

(b) Two (2) wood/shredded tire fired boilers, identified as P17B and P17C, approved in 2006 for construction, each with a nominal heat input capacity of 57.3 MMBtu/hr, both controlled by one (1) electrostatic precipitator (ESP) (identified as ES1), and exhausting through Stack 17A. Stack 17A is equipped with a continuous opacity monitoring system (COMS).

The wood/shredded tire fired boilers (P17B and P17C) units are subject to the following portions of Subpart DDDDD.

(1) 40 CFR 63.7480
(2) 40 CFR 63.7485
(3) 40 CFR 63.7490
(4) 40 CFR 63.7495(b) and (d)
(5) 40 CFR 63.7499
(6) 40 CFR 63.7500
(7) 40 CFR 63.7505
(8) 40 CFR 63.7507
(9) 40 CFR 63.7510(a), (b), (c), and (d)
(10) 40 CFR 63.7515
(11) 40 CFR 63.7520(a), (b), (d), (e), (f), and (g)

(12) 40 CFR 63.7521
(13) 40 CFR 63.7522
(14) 40 CFR 63.7525
(15) 40 CFR 63.7530(a), (c), (d), and (e)
(16) 40 CFR 63.7535
(17) 40 CFR 63.7540
(18) 40 CFR 63.7541
(19) 40 CFR 63.7545(a), (b), (d), (e)(1-7), and (e)(9)
(20) 40 CFR 63.7550 (a-f)
(21) 40 CFR 63.7555
(22) 40 CFR 63.7560
(23) 40 CFR 63.7565
(24) 40 CFR 63.7570
(25) Table 1 to 40 CFR 63, Subpart DDDDD
(26) Table 2 to 40 CFR 63, Subpart DDDDD
(27) Table 3 to 40 CFR 63, Subpart DDDDD
(28) Table 4 to 40 CFR 63, Subpart DDDDD
(29) Table 5 to 40 CFR 63, Subpart DDDDD
(30) Table 6 to 40 CFR 63, Subpart DDDDD
(31) Table 7 to 40 CFR 63, Subpart DDDDD
(32) Table 8 to 40 CFR 63, Subpart DDDDD
(33) Table 9 to 40 CFR 63, Subpart DDDDD
(34) Table 10 to 40 CFR 63, Subpart DDDDD
(35) Appendix A to 40 CFR 63, Subpart DDDDD

The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63, Subpart DDDDD.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)
The source is subject to 326 IAC 1-6-3.

326 IAC 1-5-2 (Emergency Reduction Plans)
The source is subject to 326 IAC 1-5-2.

326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
PSD applicability is discussed above in the Potential to Emit After Issuance section, and specific requirements under PSD are outlined below in State Rule Applicability - Individual Facilities.

326 IAC 2-6 (Emission Reporting)
This source, not located in Lake, Porter, or LaPorte County, is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit pursuant to 326 IAC 2-7 (Part 70). The potential to emit of VOC and PM_{10} is less than 250 tons per year; and the potential to emit of CO, NO_X, and SO_2 is less than 2,500 tons per year. Therefore, pursuant to 326 IAC 2-6-3(a)(2), triennial reporting is required. An emission statement shall be submitted in accordance with the compliance schedule in 326 IAC 2-6-3 by July 1, 2006, and every three (3) years thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 5-1 (Opacity Limitations)
This source is subject to the opacity limitations specified in 326 IAC 5-1-2(1).

326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
This source is new source of fugitive particulate matter emissions that requires a permit as set forth in 326 IAC 2 that was constructed after December 13, 1985. However, since the potential to emit fugitive particulate emissions is less than twenty-five (25) tons per year after consideration of control measures, the requirements of 326 IAC 6-5 are not applicable.

326 IAC 6.5 PM Limitations Except Lake County
This source is not subject to 326 IAC 6.5 because it is not located in one of the following counties: Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo or Wayne.

326 IAC 6.8 PM Limitations for Lake County
This source is not subject to 326 IAC 6.8 becuase it is not located in Lake County.

State Rule Applicability – Individual Facilities

326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
The source is not in one of the twenty-eight (28) source categories as defined in 326 IAC 2-2-1 and the potential to emit NO_X, PM, PM_{10}, $PM_{2.5}$, and VOC from the entire source before control is greater than two hundred fifty (250) tons/yr, each.

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable:

(a) The total emissions from boilers P17B and P17C (Stack 17A) shall not exceed the emission limits listed in the table below:

Pollutants	Emission Limit (lb/MMBtu)
CO	0.2
NO_x	0.44
PM	0.025
PM_{10}	0.042
$PM_{2.5}$	0.035
SO_2	0.115
VOC	0.017

(b) The total equivalent dry wood input to boilers P17B and P17C shall not exceed 51,875 tons per twelve consecutive month period with compliance determined at the end of each month.

(1) Dry wood is defined as wood with a moisture content less than 5% by weight.

(2) The use of one ton of shredded tire is equivalent to the use of 2.0 tons of equivalent dry wood.

(3) The use of 1 MMCF of natural gas in boilers P17, P18, or P18A is equivalent to the use of 37.8 tons of equivalent dry wood.

Therefore, the total equivalent dry wood usage shall be calculated using the following equation:

Total Equivalent Dry Wood Usage (tons) = Dry Wood Usage (tons) + Wet Wood Usage (tons)/ (1+Moisture Content of Wet Wood) + 2.0 x Shredded Tire (tons) + 37.8 x NG Usage (MMCF)

(c) The total shredded tire input to boilers P17B and P17C shall not exceed 7,410 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(d) The heating value of the dry wood combusted in boilers P17B or P17C shall not exceed 16 MMBtu/ton.

(e) The heating value of the shredded tire combusted in boilers P17B or P17C shall not exceed 32 MMBtu/ton.

(f) The wood combusted in boilers P17B and P17C shall be limited to fresh cut wood, painted/unpainted/untreated kiln dried wood scraps, or pallets.

(g) The tires combusted in boilers P17B and P17C shall be limited to shredded tires.

(h) The PM, PM_{10}, and $PM_{2.5}$ emissions from the following emission units shall be limited as follows:

Unit ID	Unit Description	Control Device	PM Emission Limit (lbs/hr)	PM_{10} Emission Limit (lbs/hr)	$PM_{2.5}$ Emission Limit (lbs/hr)
P1	Truck Soybean Receiving	Baghouse C1	0.56	0.56	0.56
P24	North Truck Receiving	Baghouse C24	0.43	0.43	0.43
P4	Soybean Cleaning	Baghouse C4	0.81	0.81	0.81
P5	Soybean Cracking/Dehulling	Cyclones C5A-H	21.94	21.94	21.94
P19	Soybean Flaking	Baghouses C19A-C	0.39	0.39	0.39
		or Baghouse C19D	0.72	0.72	0.72
P10	DTDC Meal Dryer #1	Cyclone C10	0.19	0.19	0.19
P11	DTDC Meal Dryer #2	Cyclone C11	0.19	0.19	0.19
P12	DTDC Meal Dryer #3	Cyclone C12	0.19	0.19	0.19
P12A	DTDC Meal Cooler	Cyclone C12A	0.20	0.20	0.20
P3	Kaolin Handling	Baghouse C3	0.10	0.10	0.10
P6	Hull Grinding	Baghouse C6	0.30	0.30	0.30
P7	Hull Storage	Baghouse C7	0.17	0.17	0.17
P7A or P7B	Hull Handling	Baghouse C7A	0.17	0.17	0.17
P8	Hull Pellet Cooler	Cyclone C8	5.14	5.14	5.14
P8A or P8B	Hull Pellet Storage	Baghouse C8A or Bin Vent Filter System C8B	0.17	0.17	0.17
P9	Meal Handling	Baghouse C9	0.26	0.26	0.26
P20	Meal Storage	Baghouse C20	0.26	0.26	0.26
P14	Truck Meal Loadout	Baghouse C14	0.69	0.69	0.69
P15	Barge/Railcar Meal Loadout	Baghouses C15	0.69	0.69	0.69

(i) The PM, PM_{10}, and $PM_{2.5}$ emissions from the following emission units shall be limited as follows:

Unit ID	Unit Description	Control Device	PM Emission Limit (lbs/ton)	PM_{10} Emission Limit (lbs/ton)	$PM_{2.5}$ Emission Limit (lbs/ton)
P27	North House Bin Loading	none	0.061	0.034	0.0058
P2	Truck and Railcar Receiving	restricting vehicles unloading grain to hopper-bottom rail cars	0.035	0.0078	0.00013
P2A	Annex Silo Storage	oil application system	0.025	0.0063	0.0011
P2A	Annex Silo Loading	oil application system	0.061	0.034	0.0058
P2B	Soybean Storage	oil application system	0.025	0.0063	0.0011
P2B	Soybean Handling	oil application system	0.061	0.034	0.0058

(j) The total grain received at P1 and P2 combined shall not exceed 1,020,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(k) The total grain received at the north house bin loading area, identified as P27, shall not exceed 108,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(l) The total grain processed at this source shall not exceed 940,240 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(m) The PM emissions from the soybean heater (P21) shall not exceed 0.001 pounds per ton of grain processed.

(n) The PM_{10} emissions from the soybean heater (P21) shall not exceed 0.001 pounds per ton of grain processed.

(o) The $PM_{2.5}$ emissions from the soybean heater (P21) shall not exceed 0.001 pounds per ton of grain processed.

Compliance with these limits and the potential to emit from other units at the source, shall limit the potential to emit NO_X, PM, PM_{10}, $PM_{2.5}$, and VOC from the entire source to less than 250 tons/yr, each. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

Compliance with these limits, combined with the potential to emit greenhouse gases from all other emission units at this source, shall limit the source-wide total potential to emit greenhouse gases (GHGs) to less than 100,000 tons of CO_2 equivalent emissions (CO_2e) per 12 consecutive month period and shall render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

(a) The operation of the wood/tires fired boilers will emit 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. however, pursuant to 326 IAC 2-4.1-1(b)(2), because these boilers are specifically regulated by NESHAP 40 CFR 63, Subpart DDDDD, which was issued pursuant to Section 112(d) of the CAA, these boilers are exempt from the requirements of 326 IAC 2-4.1.

(b) The operation of the Soybean Oil Extraction System, DTDC Meal Dryer Sections 1, 2, and 3, and the DTDC Meal Cooling Operation will emit 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. however, pursuant to 326 IAC 2-4.1-1(b)(2), because these units are specifically regulated by NESHAP 40 CFR 63, Subpart GGGG, which was issued pursuant to Section 112(d) of the CAA, these units are exempt from the requirements of 326 IAC 2-4.1.

(c) The operation of the natural gas fired boilers, emergency generator, and heaters, and the diesel fired emergency fire pump will emit less than 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAPs, each. Therefore, 326 IAC 2-4.1 does not apply to these units.

326 IAC 2-7-10.5(d) (Minor Source Modifications)

Pursuant to 326 IAC 2-7-10.5(d)(4)(C) (Minor Source Modifications) and MSM 129-25576-00035, issued on January 14, 2008, the baghouse (identified as C7A) to be used in conjunction with the hull handling operation (identified as P7A and P7B) shall comply with the following limits when the hull handling operation is in operation:

(a) Operate with a control efficiency of at least 99%;

(b) Have no visible emissions; and

(c) PM and PM_{10} emissions shall be less than 5.7 lbs per hour and 3.42 lbs per hour, respectively.

326 IAC 3-5 (Continuous Monitoring of Emissions)

Pursuant to 326 IAC 3-5-1(a)(1) and (2), the boilers P17B and P17C are subject to the requirements of 326 IAC 3-5 because they are required to perform continuous monitoring under 326 IAC 12 (40 CFR 60, Subpart Dc).

(a) Pursuant to 326 IAC 3-5, continuous emission monitoring systems (CEMS) for boilers P17B and P17C shall be installed, calibrated, maintained, operated, and certified for measuring opacity which meet all applicable performance specifications of 326 IAC 3-5-2.

(b) All continuous emission monitoring systems are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.

(c) Pursuant to 326 IAC 3-5-4, if revisions are made to the continuous monitoring standard operating procedures (SOP), the Permittee shall submit updates to the department biennially.

(d) Relative accuracy tests and routine quarterly audits shall be performed in accordance with the contents of the standard operating procedures (SOP) pursuant to 326 IAC 3-5-5.

(e) 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.

(f) The Permittee shall comply with the record keeping and reporting requirements of 326 IAC 3-5-6 and 326 IAC 3-5-7.

(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 and 40 CFR Part 60.

326 IAC 6-2 (Particulate Emissions Limitations for Source of Indirect Heating)

(a) The space heating units are not subject to 326 IAC 6-2 because they are not a source of indirect heating.

(b) The diesel generators are not subject to 326 IAC 6-2 because they are internal combustion sources and not a source of indirect heating.

(c) Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), PM emissions from the natural gas fired-boilers (P17, P18, and P18A) shall be limited to 0.328 pounds per MMBtu heat input, each.

This emission limit was calculated using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

where: Pt = pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input
Q = Total source maximum operating capacity rating in MMBtu/hr heat input.

(d) Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), PM emissions from the wood/shredded tire fired boilers (P17B and P17C) shall be limited to 0.27 pounds per MMBtu heat input, each.

This emission limit was calculated using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

However, pursuant to 326 IAC 6-2-1(g), if the limitation based on this equation is not consistent with the applicable limitations contained in 326 IAC 2, then the permit limitation prevails. PM emissions are limited to 0.22 lb/MMBtu under 326 IAC 2-2. This supersedes the PM limit determined under 326 IAC 6-2-4.

Also, pursuant to 326 IAC 6-2-1(f), if the limitation based on this equation is not consistent with the applicable limitations contained in NSPS 40 CFR 60 and 326 IAC 12, then the NSPS limitation prevails. 40 CFR 60, Subpart Dc specifies the PM limit to be 0.10 lb/MMBtu. This supersedes the PM limit determined under 326 IAC 6-2-4.

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

(a) The north truck receiving area (P24), the north house bin loading area (P27), the truck soybean receiving area (P1), the truck and railcar soybean and hull receiving area (P2), the annex silo loading operation (P2A), the soybean storage system (P2B), and the soybean cleaning operation (P4) at this source are the requirements of 40 CFR 60, Subpart DD (NSPS for Grain Elevators). Therefore, these operations are exempt from the requirements of 326 IAC 6-3, pursuant to 326 IAC 6-3-1(c)(5).

(b) Pursuant to 326 IAC 6-3-2, particulate emissions from each of the following operations shall not exceed the pound per hour limit listed in the table below:

Unit ID	Unit Description	Control Device	Max. Throughput Rate (tons/hr)	Particulate Emission Limit (lbs/hr)
P21	Soybean Heater	none	115	52.7
P5	Soybean Cracking/Dehulling	Cyclones C5A-H Baghouses C19A-C	115	52.7
P19	Soybean Flaking	Baghouse C19D	104.9	51.8
P10	DTDC Meal Dryer #1	Cyclone C10	83.4	49.5
P11	DTDC Meal Dryer #2	Cyclone C11	83.4	49.5
P12	DTDC Meal Dryer #3	Cyclone C12	83.4	49.5
P12A	DTDC Meal Cooler	Cyclone 12A	83.4	49.5
P3	Kaolin Handling	Baghouse C3	0.417	2.3
P6	Hull Grinding	Baghouse C6	8.05	16.6
P7	Hull Storage	Baghouse C7	15	25.2
P7A or P7B	Hull Handling	Baghouse C7A	15	25.2
P8	Hull Pellet Cooler	Baghouse C8	15	25.2
P8A	Hull Pellet Storage	Baghouses C8A-C	15	25.2
P9	Meal Handling	Baghouse C9	83.4	49.5
P20	Meal Storage Bins	Baghouse C20	300	63.0
P14	Truck Meal Loadout	Baghouse C14	383.3	65.8
P15	Barge/Railcar Meal Loadout	Baghouses C15, C21A-C	383.3	65.8

The pounds per hour limitations were calculated using one of the following equations:

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

Interpolation 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

Pursuant to 326 IAC 6-3-2(e)(3), when the process weight exceeds 200 tons per hour, the maximum allowable emission may exceed the emission limits shown in the table above, provided the concentration of particulate matter in the gas discharged to the atmosphere is less than 0.10 pounds per 1,000 pounds of gases.

According to the emission calculations (see Appendix A), the potential to emit PM after control from the grain receiving, handling, and ship out operations is less than the emission limits above. Therefore, these operations can comply with 326 IAC 6-3-2. The use of the baghouses with these operations ensures compliance with these limits.

The use of the control devices for their respective emission units is necessary to ensure compliance with the emission limits above.

326 IAC 8-1-6 (VOC Emissions)
Pursuant to 326 IAC 8-1-6 (BACT), CP#129-7488-00035 (original BACT), issued on July 17, 1995, and SSM No. 129-27572-00035 (Revised BACT), issued on August 11, 2009, the

Permittee shall control the VOC emissions from the soybean oil extraction system (P13), the DTDC dryers (P10, P11 and P12), and the DTDC cooler (P12A) with a Best Available Control Technology (BACT), which has been determined to be the following:

(a) The Permittee shall comply with the following for the soybean oil extraction system (P13):

(1) The hexane usage shall be limited to 0.225 gallons per ton of soybean crushed.

(2) The extraction and distillation process shall be controlled by a mineral oil absorber system.

(3) The VOC emissions from the soybean oil extraction system (P13) shall not exceed 0.084 pounds per ton of soybean processed.

(b) The VOC emissions from the DTDC dryers (P10, P11 and P12) shall not exceed 0.16 pounds per ton of soybean processed total.

(c) The VOC emissions from the DTDC cooler (P12A) shall not exceed 0.16 pounds per ton of soybean processed.

326 IAC 8-3-2 (Cold Cleaner Operations)
Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operation requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)
(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Compliance Determination Requirements
The compliance determination requirements applicable to this source are as follows:

Emission Unit	Control Device	Pollutant	Frequency of Testing	Limit or Requirement
boilers 17B and 17C (Stack 17A)	ESP	PM< 0.025 lb/MMBtu, PM_{10}< 0.042 lb/MMBtu, $PM_{2.5}$< 0.035 lb/MMBtu	every 5 years	326 IAC 2-2
boilers 17B and 17C (Stack 17A)	none	CO < 0.2 lb/MMBtu, NO_x< 0.39 lb/MMBtu, SO_2< 0.115 lb/MMBtu, VOC< 0.017 lb/MMBtu	every 5 years	326 IAC 2-2
boilers 17B and 17C	none	moisture content	as wood is received	326 IAC 2-2
soybean cracking and dehulling operation (P5)	Cyclones C5A-H	PM < 16.46 lb/hr, PM_{10} < 16.46 lb/hr, $PM_{2.5}$ < 16.46 lb/hr	every 5 years	326 IAC 2-2
Soybean Flaking (P19)	Baghouse C19D	PM < 0.72 lb/hr, PM_{10} < 0.72 lb/hr, $PM_{2.5}$ < 0.72 lb/hr	every 5 years	326 IAC 2-2
soybean oil extraction system (P13)	mineral oil absorber system C13	VOC < 0.084 lb/ton of soybeans processed HAP hexane < 0.225 gal/ton of soybeans crushed	every 5 years	326 IAC 8-1-6
DTDC meal dryers (P10, P11, & P12)	Cyclones C10, C11, & C12	PM < 0.19 lb/hr, PM_{10} < 0.19 lb/hr, $PM_{2.5}$ < 0.19 lb/hr *these limits are per cyclone*	no testing	326 IAC 2-2
DTDC meal dryers (P10, P11, & P12)	none	VOC < 0.16 lb/ton of soybeans processed	every 5 years	326 IAC 8-1-6
DTDC meal cooler (P12A)	Cyclone C12A	PM < 0.20 lb/hr, PM_{10} < 0.20 lb/hr, $PM_{2.5}$ < 0.20 lb/hr	no testing	326 IAC 2-2
DTDC meal cooler (P12A)	none	VOC < 0.16 lb/ton of soybeans processed	every 5 years	326 IAC 8-1-6
Kaolin Handling (P3)	Baghouse C3	PM < 0.10 lb/hr, PM_{10} < 0.10 lb/hr, $PM_{2.5}$ < 0.10 lb/hr	no testing	326 IAC 2-2
Hull Grinding (P6)	Baghouse C6	PM < 0.30 lb/hr, PM_{10} < 0.30 lb/hr, $PM_{2.5}$ < 0.30 lb/hr	no testing	326 IAC 2-2
Hull Storage (P7)	Baghouse C7	PM < 0.17 lb/hr, PM_{10} < 0.17 lb/hr, $PM_{2.5}$ < 0.17 lb/hr	no testing	326 IAC 2-2

Emission Unit	Control Device	Pollutant	Frequency of Testing	Limit or Requirement
Hull Handling (P7A & P7B)	Baghouse C7A	PM < 0.17 lb/hr, PM_{10} < 0.17 lb/hr, $PM_{2.5}$ < 0.17 lb/hr	no testing	326 IAC 2-2
Hull Pellet Cooler (P8)	Cyclone C8	PM < 5.14 lb/hr, PM_{10} < 5.14 lb/hr, $PM_{2.5}$ < 5.14 lb/hr	no testing	326 IAC 2-2
Hull Pellet Storage (P8A)	Baghouse C8A or Bin Vent Filter System C8B	PM < 0.17 lb/hr, PM_{10} < 0.17 lb/hr, $PM_{2.5}$ < 0.17 lb/hr	no testing	326 IAC 2-2
Meal Handling (P9)	Baghouse C9	PM < 0.26 lb/hr, PM_{10} < 0.26 lb/hr, $PM_{2.5}$ < 0.26 lb/hr	no testing	326 IAC 2-2
Meal Storage (P20)	Baghouse C20	PM < 0.26 lb/hr, PM_{10} < 0.26 lb/hr, $PM_{2.5}$ < 0.26 lb/hr	no testing	326 IAC 2-2
Truck Meal Loadout (P14)	Baghouse C14	PM < 0.69 lb/hr, PM_{10} < 0.69 lb/hr, $PM_{2.5}$ < 0.69 lb/hr	no testing	326 IAC 2-2
Barge/Railcar Meal Loadout (P15)	Baghouses C15	PM < 0.69 lb/hr, PM_{10} < 0.69 lb/hr, $PM_{2.5}$ < 0.69 lb/hr	no testing	326 IAC 2-2
Truck Soybean Receiving (P1)	Baghouse C1	PM < 0.56 lb/hr, PM_{10} < 0.56 lb/hr, $PM_{2.5}$ < 0.56 lb/hr	no testing	326 IAC 2-2

Compliance Monitoring Requirements
The compliance monitoring requirements applicable to this source are as follows:

Emission Unit	Control Device	Parameter	Frequency	Range	Excursions and Exceedances
boilers 17B and 17C	ESP	No. of T-R sets in service	Daily	90% in service	Response Steps
		primary voltages		Normal-Abnormal	
		secondary voltages		Normal-Abnormal	
		currents		Normal-Abnormal	
	none	wood inspections	during moisture content testing for wood received	Normal-Abnormal	
North Truck Receiving (P24)	Baghouse C24	Pressure Drop	Daily	1.0 to 7.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	
Soybean Cleaning (P4)	Baghouse C4	Pressure Drop	Daily	1.0 to 7.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	
Truck Soybean Receiving (P1)	Baghouse C1	Pressure Drop	Daily	1.0 to 7.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	

Emission Unit	Control Device	Parameter	Frequency	Range	Excursions and Exceedances
Soybean Cracking/Dehulling (P5)	Cyclones C5A-H	Cyclone Failure Detection			Response Steps
Soybean Flaking (P19)	Baghouses C19A-C19D	Pressure Drop	Daily	6.0 to 12.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	
DTDC Meal Dryer #1 (P10)	Cyclone C10	Cyclone Failure Detection			Response Steps
DTDC Meal Dryer #2 (P11)	Cyclone C11	Cyclone Failure Detection			Response Steps
DTDC Meal Dryer #3 (P12)	Cyclone C12	Cyclone Failure Detection			Response Steps
DTDC Meal Cooler (P12A)	Cyclone C12A	Cyclone Failure Detection			Response Steps
soybean oil extraction system (P13)	mineral oil absorber system C13	inlet vacuum pressure	Daily	10"$H_2$0 or less	Response Steps
		mineral oil flow rate		15 GPM or above	
		inlet oil temperature - absorber		70°F to 105°F	
		inlet oil temperature - mineral-oil-stripping column		200°F or above	
Kaolin Handling (P3)	Baghouse C3	Pressure Drop	Daily	3.0 to 9.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	
Hull Grinding (P6)	Baghouse C6	Pressure Drop	Daily	3.0 to 9.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	
Hull Storage (P7)	Baghouse C7	Pressure Drop	Daily	3.0 to 9.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	
Hull Handling (P7A & P7B)	Baghouse C7A	Pressure Drop	Daily	3.0 to 9.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	
Hull Pellet Cooler (P8)	Cyclone C8	Cyclone Failure Detection			Response Steps
Hull Pellet Storage (P8A	Baghouse C8A	Pressure Drop	Daily	3.0 to 9.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	
Meal Handling (P9)	Baghouse C9	Pressure Drop	Daily	3.0 to 9.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	
Meal Storage (P20)	Baghouse C20	Pressure Drop	Daily	3.0 to 9.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	
Truck Meal Loadout (P14)	Baghouse C14	Pressure Drop	Daily	3.0 to 9.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	
Barge/Railcar Meal Loadout (P15)	Baghouses C15, C21A-C	Pressure Drop	Daily	3.0 to 9.0 inches	Response Steps
		Visible Emissions		Normal-Abnormal	

These monitoring conditions are necessary because the control devices for the facilities must operate properly to ensure compliance with 326 IAC 2-2 (PSD), 326 IAC 6-3 (Process Operations), 326 IAC 8-1-6 (VOC BACT), 40 CFR 64 (CAM), and 326 IAC 2-7 (Part 70).

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit Renewal No. T 129-21079-00035. These corrections, changes, and removals may include Title I changes (e.g. changes that add or modify synthetic minor emission limits). Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

Change No. 1 Condition A.1 has been updated as follows:

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(14)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary soybean oil extraction plant.

Source Address:	2781 Bluff Road, Mt. Vernon, Indiana 47620
General Source Phone Number:	(812) ~~838-6651~~**833-3256**
SIC Code:	2075
County Location:	Posey
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD **Greenhouse Gas (GHG) potential to emit (PTE) is equal to or more than one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per year** Major Source, under Section 112 of the Clean Air Act Not in 1 of 28 Source Categories

Change No. 2 On October 27, 2010, the Indiana Air Pollution Control Board issued revisions to 326 IAC 2. These revisions resulted in changes to the rule sites listed in the permit. These changes are not changes to the underlining provisions. IDEM, OAQ has clarified the rule site for Emission Units and Pollution Control Equipment Summary. Additionally, the emission unit descriptions and control devices have been revised to reflect the current operating configuration.

Condition A.2 and A.3 and the corresponding Emission unit descriptions in Sections D and E of the permit have been updated as follows:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(~~15~~**14**)]

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

(a) Three (3) 33.7 million MMBtu per hour natural gas fired boilers, identified as P17, P18, and P18A, ~~permitted in 1996~~**approved in 1996 for construction**, and exhausting to Stacks 17, 18, and 18A, respectively. Under NSPS, Subpart Dc, boilers P17, P18, and P18A are considered small industrial-commercial-institutional steam generating units. **Under NESHAP, Subpart DDDDD, boilers P17, P18, and P18A are considered part of the existing, affected source.**

(b) Two (2) wood/shredded tire fired boilers, identified as P17B and P17C, ~~permitted in 2006~~ **approved in 2006 for construction**, each with a nominal heat input capacity of 57.3 MMBtu/hr, both controlled by one (1) electrostatic precipitator (ESP) (identified as ES1), and exhausting through Stack 17A. Stack 17A is equipped with a continuous opacity monitoring system (COMS). Under NSPS, Subpart Dc, boilers P17B and P17C are considered small industrial-commercial-institutional steam generating units. **Under NESHAP, Subpart DDDDD, boilers P17B and P17C are considered part of the existing, affected source.**

(c) ...

(d) One (1) north house bin loading area, identified as P27, ~~permitted in 1996~~**approved in 2001 for construction**, with a nominal throughput capacity of 360 tons per hour, **and exhausting inside the north house,** consisting of the following:

(1) One (1) totally enclosed aspirated elevator leg that transfers soybeans to enclosed conveyors.

(2) ~~Three (3)~~**Two (2)** enclosed conveyors that transfer the soybean from the north receiving area to the soybean storage areas.

Under NSPS, Subpart DD, this area is considered a grain handling operation.

(e) One (1) soybean expander system, ~~identified as P23, permitted in 1996~~**approved in 1996 for construction** and approved in 2004 for modification, with a nominal capacity of 50 tons per hour~~, controlled by cyclone C23, and exhausting to Stack 23~~. This system consists of the following:

(1) One (1) expander, forming soybean collets.

(2) One (1) ~~soybean collet cooler, permitted in 2004.~~

~~(3) Two (2)~~ totally enclosed ~~conveyors that transfer soybean fines~~**conveying system transferring material** from the ~~hull aspirator to an enclosed~~ expander ~~conveyor.~~

~~(4) Two (2) totally enclosed expander conveyors that transfer soybean flakes and fines~~**system** to the ~~expander.~~

~~(5) One (1) totally enclosed conveyor that transfers soybean collets from the expander to the cooler.~~

~~(6) One (1) totally enclosed conveyor that transfers soybean collets from the cooler to the enclosed flake conveyor~~**extraction system**.

Under NESHAP, Subpart GGGG, these emission units are considered vegetable oil production processes.

(f) One (1) truck only soybean receiving area, identified as P1, approved in 1996 for construction, with a nominal throughput capacity of 600 tons per hour~~, controlled by baghouse C1, and exhausting to Stack 1~~. This area consists of the following:

(1) One (1) truck only receiving pit.

(2) One (1) totally enclosed belt conveyor system (or equivalent), using an oil application to control PM emissions.

(3) One (1) aspirated soybean receiving leg, controlled by an oil application **to control PM emissions** and **also controlled by** baghouse C1**, exhausting to Stack 1**.

(4) One (1) enclosed belt conveyor that transfers the soybean from the receiving leg to the soybean enclosed belt conveyor.

(5) One (1) enclosed belt conveyor that loads the soybean storage silos.

Under NSPS, Subpart DD, the emission units at this area are considered a truck unloading station and grain handling operations.

(g) One (1) truck and railcar soybean receiving area, identified as P2, approved in 1996 for construction, with a nominal throughput capacity of 540 tons per hour, consisting of the following:

(1) ~~Two (2)~~ **One (1)** truck and railcar receiving pit, with PM emissions controlled by restricting vehicles unloading grain at these stations to hopper-bottom rail cars and trucks with choke unloading applications.

(2) One (1) enclosed drag conveyor system (or equivalent), using an oil application to control PM emissions.

(3) Two (2) aspirated soybean receiving legs, using an oil application **to control PM emissions** and **also controlled by** baghouse C1**, exhausting to Stack 1**.

(4) One (1) aspirated bulkweigher, using and oil application to control PM emissions and also controlled by baghouse C1, exhausting to Stack 1.

(~~4~~**5**) One (1) enclosed drag conveyor that transfers the soybean at a nominal rate of 540 tons per hour from the receiving leg to the soybean covered belt conveyor that loads the soybean silos.

Under NSPS, Subpart DD, the emission units at this area are considered truck and railcar unloading stations and grain handling operations.

(h) One (1) annex silo loading operation, identified as P2A, ~~permitted in 1996~~**approved in 1996 for construction**, with a nominal throughput rate of ~~1,140~~**1,740** tons per hour, controlled by an oil application system, and consisting of the following:

(1) - (4) ...

...

(i) One (1) soybean storage system, identified as P2B, ~~permitted in 2002~~**approved in 1996 for construction** and approved in 2009 for modification, with a nominal throughput of ~~940,240 tons per year~~**600 tons per hour**, controlled by an oil application system, and consisting of the following:

(1) - (3) ...

...

(j) - (m) ...

(n) One (1) hull grinding operation, identified as P6, approved in 1996 for construction, with a nominal throughput rate of 8.05 tons per hour, controlled by baghouse C6, and exhausting to Stack 6. This operation is consisting of the following:

(~~2~~**1**) Two (2) hull grinders.

(2) One (1) ground hulls cyclone.

(**3**~~1~~) One (1) totally enclosed drag conveyor (or equivalent) that transfers hulls from the **ground hulls cyclone**~~hull screener~~ to the hull **hopper**~~grinders~~.

(o) One (1) hull storage operation, identified as P7, approved in 1996 for construction, with a nominal throughput rate of 15 tons per hour, controlled by baghouse C7, and exhausting to Stack 7. This operation is consisting of the following:

(1) One (1) ground hulls blower that transfers hulls to the Hull storage bins.

(**2**) Hull storage bins, with a nominal capacity of 39,000 cubic feet.

(**3**) **Two (2)** ~~One (1)~~ totally enclosed drag conveyor (or equivalent) that transfers hulls to the **ground** hull**s blower**~~hopper~~.

(4) One (1) ground hulls blower that transfers hulls to the hull hopper.

(p) - (q) ...

~~(r) Pellet storage bins, identified as P8A, permitted in 1996, with a nominal capacity of 70,000 cubic feet, controlled by baghouse C8A that exhausts to Stack 8A, or bin vent filter systems C8B and C8C that exhaust to Stacks C8B and C8C.~~

(r) Pellet storage operation consisting of the following:

(1) Pellet storage bin, identified as P8A, approved in 1996 for construction, with a nominal capacity of 29,000 cubic feet, controlled by baghouse C8A that exhausts to Stack 8A.

(2) Pellet storage building, identified as P8B, approved in 1996 for construction, with a nominal capacity of 70,000 cubic feet, controlled by baghouse C8B that exhausts to Stack 8B.

(3) Only one pellet storage can receive product at any one time.

(s) - (x) ...

(y) ...

(1) - (2) ...

(3) One (1) ~~DTCD~~ **DTDC** enclosed drag conveyor (or equivalent) that transfers meal from the Meal Cooler/DTDC and four (4) DTDC cyclones (C10, C11, C12, C12A) to the meal surge bin conveyor.

...

(z) One (1) meal handling process, identified as P9, approved in 1996 for construction, with a nominal capacity of 83.4 tons of meal per hour, controlled by baghouse C9, and exhausting to Stack 9. This process consists of the following:

(1) One (1) totally enclosed ~~surge bin~~ conveyor that transfers the meal to the surge bin **or the Screener Feed Drag**.

(2) ~~Two (2)~~ **One (1)** meal surge ~~bins~~ **bin**, with a nominal storage capacity of ~~19,500~~ **19,000** cubic feet, that ~~feed~~ **feeds** to ~~the screeners or~~ the recycle leg.

(3) One (1) elevator leg that transfers the meal to the sizing process.

~~(4) One (1) ball breaker.~~

(4) One (1) Screener Feed Drag totally enclosed drag conveyor that feeds the meal screeners.

(5) ~~Five (5)~~ **Four (4)** meal screeners.
(6) - (7) ...

(8) Two (2) meal grinding hoppers~~ and two (2) aspirators~~.

(9) - (12) ...

(aa) One (1) meal storage operation, identified as P20, approved in 1996 for construction, with a nominal throughput rate of 300 tons of meal per hour, controlled by baghouse C20, and exhausting to Stack 20. This operation consists of the following:

(1) Meal storage tanks (capacity 292,000 cubic feet) and loadout **bin** ~~bins~~ (capacity **29,000** ~~58,000~~ cubic feet), with a combined nominal storage capacity of **321,000** ~~350,000~~ cubic feet.

(2) One (1) totally enclosed drag conveyor (or equivalent) that transfers soybean meal from the meal storage tanks to the meal elevator leg.

(3) One (1) meal elevator leg that operates at a nominal capacity of 300 tons per hour.

(bb) One (1) truck meal loadout operation, identified as P14, approved in 1996 for construction, with a nominal throughput rate of 383.3 tons of meal per hour, controlled by baghouse C14, and exhausting to Stack 14. This operation consists of the following:

~~(1) One (1) truck loadout scalper with a totally enclosed ball breaker.~~

(**1**~~2~~) ~~Two (2)~~ **Three (3)** totally enclosed drag conveyors (or equivalent) that transfer meal from the meal loadout bins to the truck.

(**2**~~3~~) ~~One (1)~~ **Two (2)** truck loadout chute**s, with only one chute having flow at any given time**.

(cc) ...

(1) - (2) ...

(3) One (1) totally enclosed drag conveyor (or equivalent) that transfers meal from the lower surge to rail or barge~~, controlled by baghouses C21A, C21B, and C21C, and exhausting to Stacks 21A, 21B, and 21C~~.

(4) - (6) ...

(dd) **Three (3) fixed roof hexane storage tanks.**

(1) Two (2) fixed roof hexane storage tanks, ~~permitted in 1996~~**approved in 1996 for construction**, each with a nominal storage capacity of 14,000 gallons.

(2) One (1) horizontal fixed roof hexane storage tank, approved in 2012 for construction, with a nominal storage capacity of 28,000 gallons.

All hexane tanks are vented to the distillation system and exhausted through to Stack 13 (P13). Under NESHAP, Subpart GGGG, these tanks are considered vegetable oil production processes.

(ee) ...

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(~~15~~**14**)]

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

(a) Degreasing operations that do not exceed 145 gallons per **twelve (**12**)** months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]

(b) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

(c) Emergency generators **as follows:**~~, including~~ one (1) natural gas-fired emergency generator, approved in 1997 for construction, with a maximum generating rate of 343 kilowatts. [40 CFR 63, Subpart ZZZZ]

(d) Stationary fire pump engines **as follows:**~~, including one (1)~~ **two (2)** diesel-fired ~~pump~~ **pumps**, **one (1)** ~~installed in 1997~~ **approved in 1997 for construction and one (1) approved in 2012 for construction, each** with a nominal power output rate of 305 hp. [40 CFR 63, Subpart ZZZZ]

Change No. 3 On October 27, 2010, the Indiana Air Pollution Control Board issued revisions to 326 IAC 2. These revisions resulted in changes to the rule sites listed in the permit. These changes are not changes to the underlining provisions. IDEM, OAQ has clarified the rule site for Preventive Maintenance Plan (Conditions B.12, D.1.3, D.2.2, D.3.4, and D.4.4) as follows:

Preventive Maintenance Plan [326 IAC 2-7-5(~~13~~**12**)]

Change No. 4 On October 27, 2010, the Indiana Air Pollution Control Board issued revisions to 326 IAC 2. These revisions resulted in changes to the rule sites listed in the permit. These changes are not changes to the underlining provisions. The Operational Flexibility requirements in Condition B.19 (formerly B.20) have been updated as follows:

B.~~20~~**19** Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b)~~,~~ **or** (c)~~, or (e)~~ without a prior permit revision, if each of the following conditions is met:

(1) - (4) ...

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b)~~,~~**(1) and** (c)**(1)**~~, 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)~~,~~ **and** (c)(1)~~, and (e)(2)~~.

(b) - (e) ...

Change No. 5 IDEM, OAQ has decided to clarify the Permittee's responsibility under CAM. Condition C.10, Compliance Monitoring, is updated as follows:

C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)] **[40 CFR 64] [326 IAC 3-8]**

(a) Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

(b) For monitoring required by CAM, at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(c) For monitoring required by CAM, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

C.14 Response to Excursions or Exceedances **[40 CFR 64] [326 IAC 3-8]** [326 IAC 2-7-5] [326 IAC 2-7-6]

(~~a~~**I**) ...

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

(b) - (e) ...

(II)

(a) **CAM *Response to excursions or exceedances.***

(1) **Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit (including the 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. 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). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or 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.**

(2) **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, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.**

(b) **If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.**

(c) Based on the results of a determination made under paragraph (II)(a)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a QIP. The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.

(d) Elements of a QIP:
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).

(e) If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

(f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(a)(2) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:

(1) Failed to address the cause of the control device performance problems; or

(2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(g) Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or record keeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

(h) *CAM record keeping requirements.*

(1) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(a)(2) of this condition and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

(2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable record keeping requirements.

Change No. 6 Condition C.10, General Record Keeping Requirements, is clarified as follows to provide more details on what is meant by "support information" and what is expected for "monitoring information":

C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(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. **Support information includes the following:**

(AA) All calibration and maintenance records.

(BB) All original strip chart recordings for continuous monitoring instrumentation.

(CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following:

(AA) The date, place, as defined in this permit, and time of sampling or measurements.

(BB) The dates analyses were performed.

(CC) The company or entity that performed the analyses.

(DD) The analytical techniques or methods used.

(EE) The results of such analyses.

(FF) The operating conditions as existing at the time of sampling or measurement.

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) ...

Change No. 7 IDEM, OAQ has also clarified the Permittee's responsibility under CAM, and clarified the interaction of the Quarterly Deviation and Compliance Monitoring Report and the Emergency Provisions. Condition C.18 is updated as follows:

C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] **[40 CFR 64] [326 IAC 3-8]**

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. **Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph.** Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

On and after the date by which the Permittee must use monitoring that meets the requirements of 40 CFR Part 64 and 326 IAC 3-8, the Permittee shall submit CAM reports to the IDEM, OAQ.

A report for monitoring under 40 CFR Part 64 and 326 IAC 3-8 shall include, at a minimum, the information required under paragraph (a) of this condition and the following information, as applicable:

(1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

(2) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

(3) A description of the actions taken to implement a QIP during the reporting period as specified in Section C-Response to Excursions or Exceedances. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

The Permittee may combine the Quarterly Deviation and Compliance Monitoring Report and a report pursuant to 40 CFR 64 and 326 IAC 3-8.

(b) - (d) ...

Change No. 8 The PSD Minor Limits in Condition D.1.2 have been revised. The natural gas boilers do not share control equipment or stacks with the wood/tires fueled boilers; therefore, it is not necessary to include the natural gas usage in the equivalency determination for the wood/tires fueled boilers. After review of the potential emissions for the facility, the short term emission limits for the wood/tires fueled boilers were updated to allow more operational flexibility.

D.1.2 PSD Minor Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

(a) The total emissions from boilers P17B and P17C (Stack 17A) shall not exceed the emission limits listed in the table below:

Pollutants	Emission Limit (lb/MMBtu)
PM	~~0.025~~**0.054**
PM_{10}	~~0.042~~**0.06**
$PM_{2.5}$	**0.07**
SO_2	~~0.115~~**0.23**
NO_x	0.44
VOC	~~0.017~~**0.028**
CO	0.2

(b) The total equivalent dry wood input to boilers ~~P17B, P17C, P17, P18, and P18A~~ **P17B and P17C** shall not exceed 51,875 tons per twelve consecutive month period with compliance determined at the end of each month.

(1) Dry wood is defined as wood with a moisture content less than 5% by weight.

(2) The use of one ton of shredded tire is equivalent to the use of ~~2.0~~ **1.8** tons of equivalent dry wood.

~~(3) The use of 1 MMCF of natural gas in boilers P17, P18, or P18A is equivalent to the use of 8.75 tons of equivalent dry wood.~~

Therefore, the total equivalent dry wood usage shall be calculated using the following equation:

Total Equivalent Dry Wood Usage (tons) = Dry Wood Usage (tons) + **[**Wet Wood Usage (tons)/ (1+Moisture Content of Wet Wood)**]** + ~~2~~ **1.8** x Shredded Tire (tons)~~ + 8.75 x NG Usage (MMCF)~~

(c) The total shredded tire input to boilers P17B and P17C shall not exceed 7,410 tons per twelve consecutive month period with compliance determined at the end of each month.

(d) The heating value of the dry wood combusted in boilers P17B or P17C shall not exceed 16 MMBtu/ton.

(e) The heating value of the shredded tire combusted in boilers P17B or P17C shall not exceed 32 MMBtu/ton.

(f) The wood combusted in boilers P17B and P17C shall be limited to fresh cut wood, painted/unpainted/untreated kiln dried wood scraps, or pallets.

(g) The tires combusted in boilers P17B and P17C shall be limited to shredded tires.

Compliance with these limits, in combination with the limits in Conditions D.2.1, D.3.1, and D.4.1 and the potential to emit from other units at the source, shall limit the potential to emit **NO_X, VOC,** PM**, PM_{10},** and ~~PM_{10}~~**$PM_{2.5}$** from the entire source to less than 250 tons~~/yr~~ **per twelve (12) consecutive month period**, each. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

Change No. 9 The Particulate Control requirements in Condition D.1.4 have been clarified as follows.

D.1.4 Particulate Control

In order to ~~comply~~ **ensure compliance** with Condition D.1.2, the ESP for particulate control shall be in operation and control emissions from boilers P17B and P17C at all times that these boilers are in operation.

Change No. 10 The Testing requirements in Condition D.1.5 have been updated to remove the deadline for the initial testing (since this has already occurred) and to add $PM_{2.5}$ to list of pollutants tested.

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Condition D.1.2, ~~within 60 days after achieving the maximum production rate but not later than 180 days after initial startup,~~ the Permittee shall perform PM, PM_{10}**, $PM_{2.5}$**, SO_2, NO_x, VOC, and CO testing for the emissions from Stack 17A (boilers 17B and 17C), utilizing methods as approved by the Commissioner**, at least once every five (5) years from the date of the most recent valid compliance demonstration**. The performance testing for each pollutant shall be performed at the worst case combustion scenario for each pollutant. ~~These tests shall be repeated at least once every five (5) years from the most recent valid compliance demonstration.~~ PM_{10} **and $PM_{2.5}$** include~~s~~ filterable ~~PM_{10}~~ and condensable PM_{10}. ~~Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C- Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.~~

(b) If boilers P17B and P17C have been shutdown for 90 days or more before the five (5) year date of the most recent valid compliance demonstration, the Permittee shall perform PM, PM_{10}, $PM_{2.5}$, SO_2, NO_x, VOC, and CO testing for the emissions not later than one hundred eighty (180) days after start-up, utilizing methods as approved by the Commissioner. The performance testing for each pollutant shall be performed at the worst case combustion scenario for each pollutant. PM_{10} and $PM_{2.5}$ includes filterable and condensable PM.

(c) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C- Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

(**d**~~b~~) In order to demonstrate compliance with Condition D.1.2(b)**(1)**, the Permittee shall perform analytical testing once every two (2) weeks to determine the moisture content of the wood received.

Change No. 11 The Continuous Emissions Monitoring requirements in Condition D.1.6 have been updated to the current language used for all Part 70 sources that are using continuous emissions monitors to demonstrate compliance with permit limits.

D.1.6 Continuous Emissions Monitoring [326 IAC 3-5]

(a) Pursuant to 326 IAC 3-5~~(c)(2)(A) (Continuous Monitoring of Emissions)~~, **and in order to ensure compliance with Condition D.1.2(a) and the requirements of 40 CFR 60, Subpart Dc as specified in Section E.1,** continuous emission monitoring systems (CEMS) for boilers P17B and P17C shall be installed, calibrated, maintained, operated, and certified for measuring opacity which meet all applicable performance specifications of 326 IAC 3-5-2.~~ For boilers P17B and P17C, the CEMS shall be in operation in accordance with 326 IAC 3-5 when fuel is being combusted in the associated boiler.~~

(b) All continuous emission monitoring systems are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.

(c) **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.**

(d) 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 **and 40 CFR Part 60**.

Change No. 12 The Record Keeping Requirements in Condition D.1.10 have been updated to the current language used for all Part 70 sources and the requirement for keeping records of natural gas usage is removed as it is no longer needed.

D.1.10 Record Keeping Requirements

(a) To document the compliance status with Section C - Opacity, and the particulate matter and opacity requirements in Conditions D.1.2, ~~D.1.5,~~ D.1.6, **D.1.7,** and D.1.8, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits in Condition D.1.2.

(1) Data and results from the most recent stack test.

(2) All continuous opacity monitoring data, pursuant to 326 IAC 3-5-6.

(3) The results of all Method 9 visible emission readings taken during any periods of COMS downtime.

(4) All ESP parametric monitoring readings.

(b) (~~6~~**5**) The amount of equivalent dry wood usage for each compliance period.

(c) To document the compliance status with Condition D.1.2(f), the Permittee shall maintain a copy of the contract which indicates that the wood supplier cannot deliver any type of wood which is not specified in Condition D.1.2(f).

(d) To document the compliance status with Condition ~~D.1.8~~ **D.1.9**, the Permittee shall maintain records of the results of the inspections required under Condition ~~D.1.8~~ **D.1.9**.

(e) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required to be maintained by this condition.

Change No. 13 The PM and PM_{10} Limits in Condition D.2.1 have been revised. PSD Minor limits have been added for $PM_{2.5}$. Paragraph (b) now clarifies that the limit on total grain received is for P1 and P2 combined. Since the limit for these units is combined, Unit P1 has been moved from paragraph (a) to paragraph (d). The table in paragraph (d) is updated to include the control devices for additional clarity. The limits for Units P2A and P2B are updated to clarify the emission rates for storage versus loading and handling. The changes to this condition are as follows:

D.2.1 ~~PM and PM_{10}~~ **PSD Minor** Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

(a) The ~~PM and PM_{10}~~ **PM, PM_{10}, and $PM_{2.5}$** emissions from the following emission units shall be limited as follows:

Unit ID	Unit Description	Control Device	PM Emission Limit (lbs/hr)	PM_{10} Emission Limit (lbs/hr)	**$PM_{2.5}$ Emission Limit (lbs/hr)**
P24	North Truck Receiving	Baghouse C24	0.43	0.43	**0.43**
~~P1~~	~~Truck Soybean Receiving~~	~~Baghouse C1~~	~~0.56~~	~~0.56~~	
P4	Soybean Cleaning	Baghouse C4	0.81	0.81	**0.81**

(b) The total grain received ~~at this source~~ **at P1 and P2 combined** shall not exceed ~~940,240~~ **1,020,000** tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(c) The total grain received at the north house bin loading area, identified as P27, shall not exceed 108,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(d) The ~~PM and PM_{10}~~ **PM, PM_{10}, and $PM_{2.5}$** emissions from the following emission units shall be limited as follows:

Unit ID	Unit Description	**Control Device**	PM Emission Limit (lbs/ton)	PM_{10} Emission Limit (lbs/ton)	**$PM_{2.5}$ Emission Limit (lbs/ton)**
P27	North House Bin Loading	**none**	~~0.086~~**0.061**	~~0.0290~~**0.034**	**0.0058**
P1	**Truck Soybean Receiving**	**oil application**	0.035	0.0078	**0.00013**

Unit ID	Unit Description	**Control Device**	PM Emission Limit (lbs/ton)	PM_{10} Emission Limit (lbs/ton)	**$PM_{2.5}$ Emission Limit (lbs/ton)**
P2	Truck and Railcar Receiving				
P2A	Annex Silo ~~Loading~~ **Storage**	**oil application system**	0.025	0.0063	**0.0011**
P2A	**Annex Silo Loading**	**oil application system**	**0.061**	**0.034**	**0.0058**
P2B	Soybean Storage	**oil application system**	0.025	0.0063	**0.0011**
P2B	**Soybean Loading**	**oil application system**	**0.061**	**0.034**	**0.0058**

Compliance with these limits, in combination with the limits in Conditions D.1.2, D.3.1, and D.4.1 and the potential to emit from other units at the source, shall limit the potential to emit PM and PM_{10} from the entire source to less than 250 tons~~/yr~~ **per twelve (12) consecutive month period**, each. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

Change No. 14 The Particulate Control requirements in Condition D.2.3(a) have been revised to include baghouses C27 and C1. The changes to this condition are as follows:

D.2.3 Particulate Control

(a) In order to ~~comply~~ **ensure compliance** with Condition D.2.1, each of the following emission units shall be controlled by the associated baghouse, as listed in the table below, when these units are in operation:

Unit ID	Unit Description	Baghouse ID
P24	North Truck Receiving	C24
P4	Soybean Cleaning	C4
P1	**Truck Soybean Receiving**	**C1**
P2	**Truck and Railcar Receiving**	

(b) In order to comply with Conditions D.2.1(a) and D.2.1(d), dust control oil shall be applied on all soybeans handled by emission units identified as P1, P2, P2A, P2B, and P4.

(c) 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.

Change No. 15 The Visible Emissions Notations requirements in Condition D.2.4 have been clarified to denote that this is also a requirement under 40 CFR 64 (CAM). The changes to this condition are as follows:

D.2.4 Visible Emissions Notations [40 CFR 64]

(a) **Pursuant to 40 CFR 64 (CAM), v**~~V~~isible emission notations of the exhausts from the baghouse stacks (Stacks 24~~, 1,~~ and 4) shall be performed daily during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

Change No. 16 The Parametric Monitoring requirements in Condition D.2.5 have been revised. The truck and railcar receiving (P2) is added to the list of affected emission units since this unit also exhausts to baghouse C1. The language concerning the pressure drop range is clarified The changes to this condition are as follows:

D.2.5 Parametric Monitoring [40 CFR 64]

Pursuant to 40 CFR 64 (CAM), t~~T~~he Permittee shall record the pressure drop across the baghouses used in conjunction with the north truck receiving (P24), the truck receiving (P1) **and Truck and Railcar Receiving (P2),** and the soybean cleaning (P4) operations, at least once per day when the any of the these operations is in operation. When**,** for any one reading, the pressure drop across the ~~baghouses~~**baghouse** is outside **of** the normal range~~ of~~ **, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between** 1.0 and 7.0 inches of water **unless a different upper-bound** or ~~a~~ **lower-bound value for this** range ~~established~~ **is determined** during the latest stack test~~, the Permittee shall take reasonable response steps~~. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The 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 or replaced at least once every six (6) months.

Change No. 17 The Reporting Requirements in Condition D.2.8 have been updated as follows for clarity:

D.2.8 Reporting Requirements

(a) A quarterly summary of the information to document the compliance status with Condition D.2.1(b) shall be submitted not later than thirty (30) days after the end of ~~the quarter being reported. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).~~ **each calendar quarter.**

(b) A quarterly summary of the information to document the compliance status with Condition D.2.1(c) shall be submitted not later than thirty (30) days after the end of ~~the quarter being reported. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).~~ **each calendar quarter.**

(c) The reports submitted by the Permittee do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reports required by this condition.

Change No. 18 The PSD Minor Limits in Condition D.3.1 have been revised. PSD Minor limits have been added for $PM_{2.5}$. PSD Minor limits for PM and PM_{10} are updated. There is only one emission limit for soybean flaking (P19), and all of the control devices will need to comply with these limits such that the total emission from this operation does not exceed the emission rates listed in the table. The soybean expander (P23) is removed as this unit will not have any particulate emissions. The changes to this condition are as follows:

D.3.1 PSD Minor Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

(a) The ~~PM and PM_{10}~~ **PM, PM_{10}, and $PM_{2.5}$** emissions from the following emission unit shall be limited as follows:

Unit ID	Unit Description	Control Device	PM Emission Limit (lbs/hr)	PM_{10} Emission Limit (lbs/hr)	**$PM_{2.5}$ Emission Limit (lbs/hr)**
~~P23~~	~~Soybean Expander~~	~~Cyclone C23~~	~~2.50~~	~~2.50~~	
P5	Soybean Cracking/Dehulling	Cyclones C5A-H	~~15.4~~ **21.94**	~~15.4~~ **21.94**	**21.94**
P19	Soybean Flaking	Baghouses C19A-C	0.39 **1.11**	0.39 **1.11**	**1.11**
		Baghouse C19D	~~0.73~~	~~0.73~~	
P10	DTDC Meal Dryer #1	Cyclone C10	5.39	5.39	**5.39**
P11	DTDC Meal Dryer #2	Cyclone C11	0.13	0.13	**0.13**
P12	DTDC Meal Dryer #3	Cyclone C12	0.10	0.10	**0.10**
P12A	DTDC Meal Cooler	Cyclone C12A	0.22	0.22	**0.22**

(b) The total grain processed at this source shall not exceed 940,240 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(c) The PM emissions from the soybean heater (P21) shall not exceed 0.001 pounds per ton of grain processed.

(d) The PM_{10} emissions from the soybean heater (P21) shall not exceed 0.001 pounds per ton of grain processed.

(e) The $PM_{2.5}$ emissions from the soybean heater (P21) shall not exceed 0.001 pounds per ton of grain processed.

Compliance with these limits, in combination with the limits in Conditions D.1.2, D.2.1, and D.4.1 and the potential to emit from other units at the source, shall limit the potential to emit ~~PM and PM_{10}~~ **PM, PM_{10}, and $PM_{2.5}$** from the entire source to less than 250 tons~~/yr~~ **per twelve (12) consecutive month period**, each. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

Change No. 19 The Particulate Emission Limitations in Condition D.3.2 for the soybean expander is removed as this unit will not have any particulate emissions. The changes to this condition are as follows:

D.3.2 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of following operations shall not exceed the pound per hour limits listed in the table below:

Unit ID	Unit Description	Max. Throughput Rate (tons/hr)	Particulate Emission Limit (lbs/hr)
~~P23~~	~~Soybean Expander~~	~~50~~	~~44.6~~
P21	Soybean Heater	115	52.7
P5	Soybean Cracking/Dehulling	115	52.7
P19	Soybean Flaking	104.9	51.8
P10	DTDC Meal Dryer #1	83.4	49.5
P11	DTDC Meal Dryer #2	83.4	49.5
P12	DTDC Meal Dryer #3	83.4	49.5
P12A	DTDC Meal Cooler	83.4	49.5

The pounds per hour limitations were calculated using 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

Change No. 20 The soybean processing limit in Condition D.3.3(a)(2) is removed as this throughput limitation is duplicative of the limit included in Condition D.3.1(b). For this plant, the only grain processed is soybeans. This condition is revised to include the permit numbers that established the BACT limits. The changes to this condition are as follows:

D.3.3 VOC Emissions [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (BACT)**, CP#129-7488-00035 (original BACT), issued on July 17, 1995, and SSM No. 129-27572-00035 (Revised BACT), issued on August 11, 2009**, the Permittee shall control the VOC emissions from the soybean oil extraction system (P13), the DTDC dryers (P10, P11 and P12), and the DTDC cooler (P12A) with a Best Available Control Technology (BACT), which have been determined to be the following:

(a) The Permittee shall comply with the following for the soybean oil extraction system (P13):

(1) The hexane usage shall be limited to 0.225 gallons per ton of soybean crushed.

~~(2) The amount of soybean processed at this plant shall not exceed 940,240 tons per twelve (12) consecutive month period with compliance determined at the end of each month.~~

(~~3~~**2**) The extraction and distillation process shall be controlled by a mineral oil absorber system.

(~~4~~**3**) The VOC emissions from the soybean oil extraction system (P13) shall not exceed 0.084 pounds per ton of soybean processed.

(b) The VOC emissions from the DTDC dryers (P10, P11 and P12) shall not exceed 0.16 pounds per ton of soybean processed total.

(c) The VOC emissions from the DTDC cooler (P12A) shall not exceed 0.16 pounds per ton of soybean processed.

Change No. 21 The Particulate Control Requirements in Condition D.3.5 for the soybean expander (P23) is removed as this unit will not have any particulate emissions. The changes to this condition are as follows:

D.3.5 Particulate Control

(a) In order to ~~comply~~ **ensure compliance** with Conditions D.3.1 and D.3.2, each of the following emission units shall be controlled by the associated baghouse or cyclone, as listed in the table below, when these units are in operation:

Unit ID	Unit Description	Control Device
~~P23~~	~~Soybean Expander~~	~~Cyclone C23~~
P5	Soybean Cracking/Dehulling	Cyclones C5A-H
P19	Soybean Flaking	Baghouses C19A-C
		Baghouse C19D
P10	DTDC Meal Dryer #1	Cyclone C10
P11	DTDC Meal Dryer #2	Cyclone C11
P12	DTDC Meal Dryer #3	Cyclone C12
P12A	DTDC Meal Cooler	Cyclone 12A

(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.

Change No. 22 The VOC Control requirements in Condition D.3.6 have been clarified as follows.

D.3.6 VOC Control

In order to ~~comply~~ **ensure compliance** with Condition D.3.3(a), the soybean oil extraction system (P13) shall be controlled by the mineral oil absorber system (C13) when this system is in operation.

Change No. 23 The Testing requirements in Condition D.3.7 have been updated to remove the deadline for the initial testing (since this has already occurred) and to add $PM_{2.5}$ to list of pollutants tested.

D.3.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Conditions D.3.1 and D.3.2, the Permittee shall perform PM**, PM_{10},** and ~~PM_{10}~~**$PM_{2.5}$** testing for the soybean cracking and dehulling operation (P5)~~ no later than five (5) years from the last valid compliance demonstration,~~ **and Soybean Flaking (P19)** utilizing methods as approved by the Commissioner**, at least once every five (5) years from the date of the most recent valid compliance demonstration**. **Testing on Stack P19D shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration for P19. Testing on Stack P19 shall be conducted within 180 days of start-up of the alternate operating scenario in which Baghouses C19A, C19B, and C19C are utilized for particulate control from the Soybean Flaking Operations (P19).**~~ These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C- Performance Testing contains the Permittee's obligations with regard to the performance testing required by this condition.~~ PM_{10} **and $PM_{2.5}$** include~~s~~ filterable ~~PM_{10}~~ and condensable PM_{10}.

(b) In order to demonstrate compliance with Condition D.3.3, the Permittee shall perform VOC testing for the soybean oil extraction system (P13) and the DTDC meal dryers (P10 and P11) ~~no later than five (5) years from the last valid compliance demonstration,~~ utilizing methods as approved by the Commissioner**, at least once every five (5) years from the date of the most recent valid compliance demonstration**. ~~These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C- Performance Testing contains the Permittee's obligations with regard to the performance testing required by this condition~~.

(c) ~~Within 60 days after achieving maximum capacity of P12 and P12A, but not later than one hundred eighty (180) days after modification of P12 and P12A as approved in SSM No. 129-27572-00035, in~~ **In** order to demonstrate compliance with Condition D.3.3(b) and (c), the Permittee shall perform VOC testing for the DTDC meal dryer section 3 (P12) and the DTDC meal cooler (P12A) when P12 and P12A are in operation **utilizing methods as approved by the Commissioner**. ~~After these initial tests, testing~~ **Testing** on P12 and P12A shall be repeated in conjunction with testing on P10 and P11 at least once every five (5) years from the date of the most recent valid compliance demonstration for P10 and P11. ~~Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C- Performance Testing contains the Permittee's obligations with regard to the performance testing required by this condition.~~

(d) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C- Performance Testing contains the Permittee's obligations with regard to the performance testing required by this condition.

Change No. 24 The Visible Emissions Notations Requirements in Condition D.3.8(b) for the soybean expander (P23) are removed as this unit will not have any particulate emissions. The changes to this condition are as follows:

D.3.8 Visible Emissions Notations **[40 CFR 64]**

(a) Pursuant to 40 CFR 64 (CAM), visible emission notations of the exhausts from Stacks 5, 19, P19D, and 10 shall be performed daily during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) Visible emission notations of the exhausts from Stacks ~~23,~~ 11, 12 and 12A shall be performed daily during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(c) 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.

(d) In the case of batch or noncontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(e) 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.

(f) If abnormal emissions are observed, the Permittee shall take **a** reasonable response ~~steps~~. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

Change No. 25 The Parametric Monitoring Requirements in Condition D.3.9 have been revised. The normal pressure drop range for the baghouses controlling the soybean flaking operation has been updated, and the language concerning the pressure drop range is clarified The changes to this condition are as follows:

D.3.9 Parametric Monitoring [40 CFR 64]

Pursuant to 40 CFR 64 (CAM), the Permittee shall record the pressure drop across the baghouses used in conjunction with the soybean flaking operation (P19) at least once per day when any of these operations is in operation. When**,** for any one reading, the pressure drop across the ~~baghouses~~**baghouse** is outside **of** the normal range~~ of~~**, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between** ~~3.0~~ **6.0** and ~~9.0~~ **12.0** inches of water **unless a different upper-bound** or ~~a~~**lower-bound value for this** range ~~established~~**is determined** during the latest stack test~~, the Permittee shall take reasonable response steps~~. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The 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 or replaced at least once every six (6) months.

Change No. 26 The Record Keeping Requirements in Condition D.3.13(d) have been clarified as follows.

D.3.13 Record Keeping Requirements

(a) - (c) ...

(d) To document the compliance status with Condition D.3.12, the Permittee shall maintain the following records:

~~(1) Records of the daily airflow and VOC (hexane) concentration measured at the vent for the mineral oil absorber.~~

(**1**~~2~~) Records of the days the lower meal temperature of the desolventizer is below 215 degrees F and meal laboratory VOC test results for those days.

(**2**~~3~~) Electronic data management system (EDMS) records for the inlet vacuum pressure of the vapor stream to the absorber, flow rate of the mineral oil through the absorber, the mineral oil temperature entering the absorber and mineral oil temperature entering the stripping column. Records of the times and reasons of the breakdown of the EDMS and efforts made to correct the problem should accompany any supplemental or intermittent monitoring records occurring as a result of EDMS failure.

(e) ...

Change No. 27 The Reporting Requirements in Condition D.3.14 have been clarified as follows.

D.3.14 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.3.1(b) and D.3.3(a)(2) shall be submitted not later than thirty (30) days after the end of the quarter being reported. **Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition.** The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Change No. 28 The PSD Minor Limits in Condition D.4.1 have been revised. PSD Minor limits have been added for $PM_{2.5}$. The Unit ID for Hull Handling has been updated. The control device information for the Hull Pellet Cooler (P8), the Hull Pellet Storage (P8A), and the Barge/Railcar Meal Loadout (P15) is clarified. The changes to this condition are as follows:

D.4.1 ~~PM and PM_{10}~~**PSD Minor** Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the PM**, PM_{10},** and ~~PM_{10}~~**$PM_{2.5}$** emissions from the following emission unit shall be limited as follows:

Unit ID	Unit Description	Control Device	PM Emission Limit (lbs/hr)	PM_{10} Emission Limit (lbs/hr)	**$PM_{2.5}$ Emission Limit (lbs/hr)**
P3	Kaolin Handling	Baghouse C3	0.10	0.10	**0.10**
P6	Hull Grinding	Baghouse C6	0.30	0.30	**0.30**
P7	Hull Storage	Baghouse C7	0.17	0.17	**0.17**
P7A ~~&~~ **or** P7B	Hull Handling	Baghouse C7A	0.17	0.17	**0.17**
P8	Hull Pellet Cooler	~~Baghouse~~ **Cyclone** C8	5.14	5.14	**5.14**
P8A	Hull Pellet Storage	Baghouses C8A~~-C~~ **or Bin Vent Filter System C8B**	0.17	0.17	**0.17**
P9	Meal Handling	Baghouse C9	0.26	0.26	**0.26**
P20	Meal Storage	Baghouse C20	0.26	0.26	**0.26**
P14	Truck Meal Loadout	Baghouse C14	0.69	0.69	**0.69**
P15	Barge/Railcar Meal Loadout	Baghouses C15~~, C21A-C~~	0.69	0.69	**0.69**

Compliance with these limits, in combination with the limits in Conditions D.1.2, D.2.1, and D.3.1 and the potential to emit from other units at the source, shall limit the potential to emit PM**, PM_{10},** and ~~PM_{10}~~**$PM_{2.5}$** from the entire source to less than 250 tons~~/yr~~ **per twelve (12) consecutive month period**, each. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

Change No. 29 The Minor Source Modifications Condition D.4.2 is revised as follows to include the permit number that established the limits:

D.4.2 Minor Source Modifications [326 IAC 2-7-10.5(d)]

Pursuant to 326 IAC 2-7-10.5(d)(4)(C) (Minor Source Modifications) **and MSM 129-25576-00035, issued on January 14, 2008**, the baghouse (identified as C7A) to be used in conjunction with the hull handling operation (identified as P7A and P7B) shall comply with the following limits when the hull handling operation is in operation:

(a) Operate with a control efficiency of at least 99%;

(b) Have no visible emissions; and

(c) PM and PM_{10} emissions shall be less than 5.7 lbs per hour and 3.42 lbs per hour, respectively.

Change No. 30 The table of Particulate Emission Limitations in Condition D.4.3 has been clarified with regard to the Unit ID for Hull Handling as follows:

D.4.3 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of following operations shall not exceed the pound per hour limits listed in the table below:

Unit ID	Unit Description	Max. Throughput Rate (tons/hr)	Particulate Emission Limit (lbs/hr)
P3	Kaolin Handling	0.417	2.28
P6	Hull Grinding	8.05	16.6
P7	Hull Storage	15	25.2
P7A ~~&~~ **or** P7B	Hull Handling	15	25.2
P8	Hull Pellet Cooler	15	25.2
P8A **or P8B**	Hull Pellet Storage	15	25.2
P9	Meal Handling	83.4	49.5
P20	Meal Storage Bins	300	63.0
P14	Truck Meal Loadout	383.3	65.8
P15	Barge/Railcar Meal Loadout	383.3	65.8

The pounds per hour limitation were calculated using one the following equations:

(a) Interpolation of the data for the process weight between one hundred (100) 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

(b) 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

Pursuant to 326 IAC 6-3-2(e)(3), when the process weight exceeds 200 tons per hour, the maximum allowable emission may exceed the emission limits shown in the table above, provided the concentration of particulate matter in the gas discharged to the atmosphere is less than 0.10 pounds per 1,000 pounds of gases.

Change No. 31 The Particulate Control Requirements in Condition D.4.5 have been revised. The Unit ID for Hull Handling has been updated. The control device information for the Hull Pellet Cooler (P8), the Hull Pellet Storage (P8A), and the Barge/Railcar Meal Loadout (P15) is clarified. The changes to this condition are as follows:

D.4.5 Particulate Control

(a) In order to ~~comply~~ **ensure compliance** with Conditions D.4.1, D.4.2, and D.4.3, each of the following emission units shall be controlled by the associated baghouse **or cyclone**, as listed in the table below, when these units are in operation:

Unit ID	Unit Description	Control Device
P3	Kaolin Handling	Baghouse C3
P6	Hull Grinding	Baghouse C6
P7	Hull Storage	Baghouse C7
P7A ~~&~~ **or** P7B	Hull Handling	Baghouse C7A
P8	Hull Pellet Cooler	~~Baghouse~~ **Cyclone** C8
P8A **or P8B**	Hull Pellet Storage	Baghouses C8A~~-C~~ **or Bin Vent Filter System C8B**
P9	Meal Handling	Baghouse C9
P20	Meal Storage	Baghouse C20
P14	Truck Meal Loadout	Baghouse C14
P15	Barge/Railcar Meal Loadout	Baghouses C15~~, C21A-C~~

(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.

Change No. 32 The Visible Emissions Notations Requirements in Condition D.4.6 have been revised as follows to accurately reflect the stacks that correspond to the control devices controlling particulate emissions:

D.4.6 Visible Emissions Notations [40 CFR 64]

~~(a) Visible emission notations of the exhausts from the Stacks 3, 6, 7, 7A, 8, 8A, 8B, 8C, 9, 20, 14, 15, 21A through 21C shall be performed daily during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.~~

(a) Pursuant to 40 CFR 64 (CAM), visible emission notations of the exhausts from the Stacks 6, 8, 9, 20, 14, and 15 shall be performed daily during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) Visible emission notations of the exhausts from the Stacks 3, 7, 7A, 8A, and 8B shall be performed daily during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(~~b~~**c**) 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~~**d**) In the case of batch or noncontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(~~d~~**e**) 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~~**f**) If abnormal emissions are observed, the Permittee shall take **a** reasonable response ~~steps~~. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

Change No. 33 The Parametric Monitoring requirements in Condition D.4.7 have been revised. The hull pellet cooler (P8) is removed from the list of affected emission units since this unit is controlled by a cyclone. The language concerning the pressure drop range is clarified. The changes to this condition are as follows:

D.4.7 Parametric Monitoring [40 CFR 64]

~~The Permittee shall record the pressure drop across the baghouses used in conjunction with the kaolin handling operation (P3), the hull grinding operation (P6), the hull storage and operation (P7), the hull handling operation (P7A & P7B), the hull pellet cooler (P8), the pellet storage bins (P8A), the meal handling process (P9), the meal storage operation (P20), the truck meal loadout operation (P14), and the barge/railcar meal loadout operation (P15), at least once per day when the any of the these operations is in operation. When for any one reading, the pressure drop across the baghouses is outside the normal range of 3.0 and 9.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.~~

(a) Pursuant to 40 CFR 64 (CAM), the Permittee shall record the pressure drop across the baghouses used in conjunction with the hull grinding operation (P6), the meal handling process (P9), the meal storage operation (P20), the truck meal loadout operation (P14), and the barge/railcar meal loadout operation (P15), at least once per day when the any of the these operations is in operation. When, for any one reading, the pressure drop across the baghouse is outside of the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 3.0 and 9.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test.

(b) The Permittee shall record the pressure drop across the baghouses used in conjunction with the kaolin handling operation (P3), the hull storage and operation (P7), the hull handling operation (P7A or P7B), and the pellet storage bins (P8A or P8B), at least once per day when the any of the these operations is in operation. When, for any one reading, the pressure drop across the baghouse is outside of the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 3.0 and 9.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test.

(c) Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(d) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

Change No. 34 The Cyclone Failure Detection Requirement in Condition D.4.9 has been added for the cyclone controlling emissions from the Hull Pellet Cooler (P8).

D.4.9 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Change No. 35 The description of the degreasing activities (Section D.5) is clarified as follows:

SECTION D.5 FACILITY OPERATION CONDITIONS - Degreasing Operations

Facility Description [326 IAC 2-7-5(14)] - Insignificant Activities (a) Degreasing operations that do not exceed 145 gallons per **twelve (**12**)** months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5] (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Change No. 36 Conditions E.1.1, E.2.1, E.3.1, and E.4.1, have been updated to remove the address for notifications and reports. These addresses are listed in Section C of the permit and do not need to be re-stated in Section E. The changes are as follows:

E.1.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR 60, Subpart A]

~~(a)~~ Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the facilities described in Section E.1 except as otherwise specified in 40 CFR Part 60, Subpart Dc.

~~(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:~~

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

E.2.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR 60, Subpart A]

~~(a)~~ Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the facilities described in Section E.2 except as otherwise specified in 40 CFR Part 60, Subpart DD.

~~(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:~~

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

E.3.1 General Provisions Relating to NESHAP GGGG [326 IAC 20-1] [40 CFR Part 63, Subpart A]

~~(a)~~ Pursuant to 40 CFR 63.~~4480~~**2870**, 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, as specified in 40 CFR Part 63, Subpart GGGG in accordance with schedule in 40 CFR 63 Subpart GGGG.

~~(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:~~

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

~~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~~

E.4.1 General Provisions Relating to NESHAP ZZZZ [326 IAC 20-1] [40 CFR Part 63, Subpart A]

~~(a)~~ Pursuant to 40 CFR 63.~~2540~~**6665**, 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, as specified in Table 8 of 40 CFR 63, Subpart ZZZZ in accordance with the Schedule in 40 CFR Part 63, Subpart ZZZZ.

~~(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:~~

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

~~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~~

Change No. 37 The descriptions of the emergency generators and fire pump engines (Section E.4) are clarified as follows:

SECTION E.4 National Emission Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20-82]

Facility Description [326 IAC 2-7-5(14)]: Reciprocating Internal Combustion Engines

Specifically Regulated Insignificant Activities

(c) Emergency generators **as follows:**~~, including~~ one (1) natural gas-fired emergency generator, approved in 1997 for construction, with a nominal generating rate of 343 kilowatts. Under NESHAP, Subpart ZZZZ, this engine is considered an existing affected source.

(d) Stationary fire pump engines **as follows:**~~, including~~ two (2) diesel-fired pumps, one (1) approved in 1997 for construction and one (1) approved in 2012 for construction, each with a nominal power output rate of 305 hp. Under NESHAP, Subpart ZZZZ, this engine is considered a new affected source.

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

Change No. 38 IDEM, OAQ has added Section E.5 to identify the applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD]:

SECTION E.5 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters

Facility Description [326 IAC 2-7-5(14)]:

(a) Three (3) 33.7 MMBtu per hour natural gas fired boilers, identified as P17, P18, and P18A, approved in 1996 for construction, and exhausting to Stacks 17, 18, and 18A, respectively.

(b) Two (2) wood/shredded tire fired boilers, identified as P17B and P17C, approved in 2006 for construction, each with a nominal heat input capacity of 57.3 MMBtu/hr, both controlled by one (1) electrostatic precipitator (ESP) (identified as ES1), and exhausting through Stack 17A. Stack 17A is equipped with a continuous opacity monitoring system (COMS).

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.5.1 General Provisions Relating to NESHAP DDDDD [326 IAC 20-1] [40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.7565, 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 wood/shredded tire fired boilers (P17B and P17C) as specified in Table 10 of 40 CFR Part 63, Subpart DDDDD in accordance with schedule in 40 CFR 63, Subpart DDDDD.

E.5.2 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR 63, Subpart DDDDD] [326 IAC 20-95]

Pursuant to 40 CFR 63.7495, the Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters) (included as Attachment E), which are incorporated by reference as 326 IAC 20-95:

(a) for the wood/shredded tire fired boilers (P17B and P17C):

(1) 40 CFR 63.7480
(2) 40 CFR 63.7485
(3) 40 CFR 63.7490
(4) 40 CFR 63.7495(b) and (d)
(5) 40 CFR 63.7499
(6) 40 CFR 63.7500
(7) 40 CFR 63.7505
(8) 40 CFR 63.7507
(9) 40 CFR 63.7510(a), (b), (c), and (d)
(10) 40 CFR 63.7515
(11) 40 CFR 63.7520(a), (b), (d), (e), (f), and (g)
(12) 40 CFR 63.7521
(13) 40 CFR 63.7522
(14) 40 CFR 63.7525
(15) 40 CFR 63.7530(a), (c), (d), and (e)
(16) 40 CFR 63.7535
(17) 40 CFR 63.7540
(18) 40 CFR 63.7541
(19) 40 CFR 63.7545(a), (b), (c), (d), (e)(1-7), and (e)(9)
(20) 40 CFR 63.7550 (a-f)
(21) 40 CFR 63.7555
(22) 40 CFR 63.7560
(23) 40 CFR 63.7565
(24) 40 CFR 63.7570
(25) Table 1 to 40 CFR 63, Subpart DDDDD
(26) Table 2 to 40 CFR 63, Subpart DDDDD
(27) Table 3 to 40 CFR 63, Subpart DDDDD
(28) Table 4 to 40 CFR 63, Subpart DDDDD
(29) Table 5 to 40 CFR 63, Subpart DDDDD
(30) Table 6 to 40 CFR 63, Subpart DDDDD
(31) Table 7 to 40 CFR 63, Subpart DDDDD
(32) Table 8 to 40 CFR 63, Subpart DDDDD
(33) Table 9 to 40 CFR 63, Subpart DDDDD
(34) Table 10 to 40 CFR 63, Subpart DDDDD
(35) Appendix A to 40 CFR 63, Subpart DDDDD

Change No. 39 IDEM, OAQ has added Section E.6 to identify the applicable requirements of the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR Part 60, Subpart IIII]:

SECTION E.6 Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR 60, Subpart IIII] [326 IAC 12]

Facility Description [326 IAC 2-7-5(14)]

One (1) stationary diesel-fired fire pump engine, approved in 2012 for construction, with a nominal power output rate of 305 hp. Under NSPS, Subpart IIII, this engine is an affected source.

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

New Source Performance Standards (NSPS)

E.6.1 General Provisions Relating to NSPS IIII [326 IAC 12-1] [40 CFR 60, Subpart A]

Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the facilities described in Section E.6 except as otherwise specified in Table 8 to 40 CFR Part 60, Subpart IIII.

E.6.2 Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR 60, Subpart IIII] [326 IAC 12]

Pursuant to 40 CFR 60, Subpart IIII, the Permittee shall comply with the provisions of Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, which are incorporated by reference as 326 IAC 12, (included as Attachment F of this permit) as specified as follows:

(1) 40 CFR 60.4200(a)(2)(ii) and (a)(4)
(2) 40 CFR 60.4205(c) and (e)
(3) 40 CFR 60.4206
(4) 40 CFR 60.4207(b)
(5) 40 CFR 60.4208
(6) 40 CFR 60.4209, (a)
(7) 40 CFR 60.4211(a), (c), (f), and (g)(2)
(8) 40 CFR 60.4212, (a), (b), (c), and (e)
(9) 40 CFR 60.4214(b)
(10) 40 CFR 60.4218
(11) 40 CFR 60.4219
(12) Table 4 to 40 CFR 60, Subpart IIII
(13) Table 5 to 40 CFR 60, Subpart IIII
(14) Table 8 to 40 CFR 60, Subpart IIII

Change No. 40 The Emergency Occurrence Report has been updated as follows:

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Consolidated Grain and Barge Co.
Source Address: 2781 Bluff Road, Mt. Vernon, Indiana 47620
Part 70 Permit No.: ~~129-21079-00035~~ **T129-31079-00035**

This form consists of 2 pages **Page 1 of 2**

☐ This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), ~~within~~ **not later than** four (**4**) **daytime** business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile ~~within~~ **not later than** two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

Change No. 41 A Quarterly Report for Total Grain Received (P1 and P2 combined) has been added as follows:

Part 70 Quarterly Report

Source Name:	**Consolidated Grain and Barge Co.**
Source Address:	**2781 Bluff Road, Mt. Vernon, Indiana 47620**
Part 70 Permit No.:	**T129-31079-00035**
Facility:	**Grain Receiving Facilities**
Parameter:	**Total Grain Received (P1 and P2 combined)**
Limit:	**Less than 1,020,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month**

Change No. 42 IDEM, OAQ has clarified the interaction of the Quarterly Deviation and Compliance Monitoring Report and the Emergency Provisions. The Quarterly Deviation and Compliance Monitoring Report has been updated as follows:

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

...

This report shall be submitted quarterly based on a calendar year. **Proper notice submittal under Section B – Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C – General Reporting.** Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked “No deviations occurred this reporting period”.

...

Additional Changes Subsequent to the Initial Public Notice - July 11, 2012 through August 10, 2012

On July 11, 2012, the Office of Air Quality (OAQ) had a notice published in the Mount Vernon Democrat in Mount Vernon, Indiana, stating that the Consolidated Grain and Barge Co. had applied for a new source review and renewal of its Part 70 Operating Permit Renewal issued on August 1, 2007. On August 9, 2012, OAQ received comments from Douglas VanMeter, on behalf of Consolidated Grain and Barge Co. The summary of the comments and IDEM, OAQ responses, including changes to the permit, are summarized below. These corrections, changes, and removals may include Title I changes (e.g. changes that add or modify synthetic minor emission limits). Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

Company Comment 1:

The source status should read that Greenhouse Gas (GHG) potential to emit (PTE) is less than one hundred thousand (100,000) tons of CO_2 equivalent emissions per year. CGB requests that the permit retain previous limits on fuel combustion (total equivalent dry wood and fuel equivalencies) which will maintain the source as a minor source for GHG emissions.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(14)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary soybean oil extraction plant.

Source Address:	2781 Bluff Road, Mt. Vernon, Indiana 47620
General Source Phone Number:	(812) ~~838-6651~~**833-3256**
SIC Code:	2075
County Location:	Posey
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD Greenhouse Gas (GHG) potential to emit (PTE) is ~~equal to or more~~ less than one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per year Major Source, under Section 112 of the Clean Air Act Not in 1 of 28 Source Categories

D.1.2 PSD Minor Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

(a) ...

(b) The total equivalent dry wood input to boilers P17B, P17C, P17, P18, and P18A shall not exceed 51,875 tons per twelve consecutive month period with compliance determined at the end of each month.

(1) Dry wood is defined as wood with a moisture content less than 5% by weight.

(2) The use of one ton of shredded tire is equivalent to the use of 1.8 tons of equivalent dry wood.

(3) The use of 1 MMCF of natural gas in boilers P17, P18, or P18A is equivalent to the use of 8.75 tons of equivalent dry wood.

Therefore, the total equivalent dry wood usage shall be calculated using the following equation:

Total Equivalent Dry Wood Usage (tons) = Dry Wood Usage (tons) + Wet Wood Usage (tons)/ (1+Moisture Content of Wet Wood) + 1.8 x Shredded Tire (tons) + 8.75 x NG Usage (MMCF)

(c) The total shredded tire input to boilers P17B and P17C shall not exceed 7,410 tons per twelve consecutive month period with compliance determined at the end of each month.

(d) The heating value of the dry wood combusted in boilers P17B or P17C shall not exceed 16 MMBtu/ton.

(e) The heating value of the shredded tire combusted in boilers P17B or P17C shall not exceed 32 MMBtu/ton.

(f) The wood combusted in boilers P17B and P17C shall be limited to fresh cut wood, painted/unpainted/untreated kiln dried wood scraps, or pallets.

(g) The tires combusted in boilers P17B and P17C shall be limited to shredded tires.

Compliance with these limits, in combination with the limits in Conditions D.2.1, D.3.1, and D.4.1 and the potential to emit from other units at the source, shall limit the potential to emit PM and PM_{10} from the entire source to less than 250 tons/yr, each. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

The quarterly report form for fuel consumption should be updated to include the natural gas boilers and the equation updated as described above.

IDEM Response:

IDEM, OAQ has revised Condition D.1.2 to re-instate the previous limits. The original natural gas fuel equivalency of 8.75 tons of equivalent dry wood per million cubic feet of natural gas (ton wood/MMCF) was based on limiting CO emissions to less than 250 tons per twelve (12) months. This emission factor was established using the original permitted emission factors:0.6 lb/ MMBtu of dry wood and 84 lb/MMCF natural gas. The source tested at an emission rate of only 0.2 lb/MMBtu of dry wood; therefore, the revised potential to emit of CO is only 83.00 tons per year from combustion of dry wood equivalent. The 8.75 ton wood/MMCF is no longer needed to keep the source minor under PSD for CO because the maximum combustion of both wood and natural gas is less than 250 tons per year without including an equivalency.

The new natural gas fuel equivalency is based on limiting the CO_2 equivalent (CO_2e) emissions to less than 100,000 tons per twelve (12) months. This calculation utilizes CO_2e emission factors of 199.47 lb/MMBtu for dry wood and 12,730 lb/MMCF natural gas. This equates to a new equivalent value of 37.8 tons of dry wood per million cubic feet of natural gas.

D.1.2 PSD Minor Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

(a) The total emissions from boilers P17B and P17C (Stack 17A) shall not exceed the emission limits listed in the table below:

Pollutants	Emission Limit (lb/MMBtu)
CO	0.2
NO_x	0.44
PM	0.~~05~~4**025**
PM_{10}	0.~~06~~**042**

$PM_{2.5}$	0.~~07~~**035**
SO_2	0.~~23~~**115**
VOC	0.~~028~~**017**

(b) The total equivalent dry wood input to boilers **P17B, P17C, P17, P18, and P18A** ~~P17B and P17C~~ shall not exceed 51,875 tons per twelve consecutive month period with compliance determined at the end of each month.

(1) Dry wood is defined as wood with a moisture content less than 5% by weight.

(2) The use of one ton of shredded tire is equivalent to the use of ~~1.8~~2.0 tons of equivalent dry wood.

(3) The use of 1 MMCF of natural gas in boilers P17, P18, or P18A is equivalent to the use of 37.8 tons of equivalent dry wood.

Therefore, the total equivalent dry wood usage shall be calculated using the following equation:

Total Equivalent Dry Wood Usage (tons) = Dry Wood Usage (tons) + **[**Wet Wood Usage (tons)/ (1+Moisture Content of Wet Wood)**]** + ~~1.8~~**2.0** x Shredded Tire (tons) **+ 37.8 x NG Usage (MMCF)**

(c) The total shredded tire input to boilers P17B and P17C shall not exceed 7,410 tons per twelve consecutive month period with compliance determined at the end of each month.

(d) The heating value of the dry wood combusted in boilers P17B or P17C shall not exceed 16 MMBtu/ton.

(e) The heating value of the shredded tire combusted in boilers P17B or P17C shall not exceed 32 MMBtu/ton.

(f) The wood combusted in boilers P17B and P17C shall be limited to fresh cut wood, painted/unpainted/untreated kiln dried wood scraps, or pallets.

(g) The tires combusted in boilers P17B and P17C shall be limited to shredded tires.

Compliance with these limits, in combination with the limits in Conditions D.2.1, D.3.1, and D.4.1 and the potential to emit from other units at the source, shall limit the potential to emit NO_X, VOC, PM, PM_{10}, and $PM_{2.5}$ from the entire source to less than 250 tons per twelve (12) consecutive month period, each. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

Compliance with these limits, combined with the potential to emit greenhouse gases from all other emission units at this source, shall limit the source-wide total potential to emit greenhouse gases (GHGs) to less than 100,000 tons of CO_2 equivalent emissions (CO_2e) per 12 consecutive month period and shall render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.12 Record Keeping Requirements

(a) To document the compliance status with Section C - Opacity, and the particulate matter and opacity requirements in Conditions D.1.2, D.1.6, D.1.7, and D.1.8, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits in Condition D.1.2.

(1) Data and results from the most recent stack test.

(2) All continuous opacity monitoring data, pursuant to 326 IAC 3-5-6.

(3) The results of all Method 9 visible emission readings taken during any periods of COMS downtime.

(4) All ESP parametric monitoring readings.

(b) To document the compliance status with Condition D.1.2, the Permittee shall maintain monthly records of the following:

(1) The amount of the wood combusted each month in boilers P17B and P17C.

(2) The type (fresh cut wood, painted/unpainted/untreated kiln dried wood scraps, or pallets) and the moisture contents of the wood combusted in boilers P17B and P17C.

(3) The amount of shredded tire combusted in boilers P17B and P17C.

(4) **The total natural gas usage in boilers P17, P18, and P18A.**

(5) The amount of equivalent dry wood usage for each month using the equation in Condition D.1.2(b).

~~(5) The amount of equivalent dry wood usage for each compliance period.~~

(c) To document the compliance status with Condition D.1.2(f), the Permittee shall maintain a copy of the contract which indicates that the wood supplier cannot deliver any type of wood which is not specified in Condition D.1.2(f).

(d) To document the compliance status with Condition D.1.9, the Permittee shall maintain records of the results of the inspections required under Condition D.1.9.

(e) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required to be maintained by this condition.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name:	Consolidated Grain and Barge Co.
Source Address:	2781 Bluff Road, Mt. Vernon, Indiana 47620
Part 70 Permit No.:	T129-31079-00035
Facility:	Boilers P17B and P17C
Parameter:	Total Equivalent Dry Wood Usage
Limit:	Less than 51,875 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Total Equivalent Dry Wood Usage (tons) = Dry Wood Usage (tons) + **[**Wet Wood Usage (tons) / (1+Moisture Content of Wet Wood)**]** + ~~1.8~~ **2.0** x Shredded Tire (tons) **+ 37.8 x NG Usage (MMCF)**

QUARTER: _____ YEAR: _____

Month	Total Equivalent Dry Wood Usage for This Month (tons)	Total Equivalent Dry Wood Usage for Previous 11 Months (tons)	Total Equivalent Dry Wood Usage for 12-Month Period (tons)

☐ No deviation occurred in this quarter.

☐ Deviations occurred in this quarter.
Deviation has been reported on: _____

Submitted By: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Company Comment 2:

In the table under Condition D.2.1(d), Unit P2 is not controlled by Baghouse C1 and thus should have a separate control device listed as "none" or "restricting vehicles unloading grain to hopper-bottom rail cars and trucks which choke unloading applications". In the facility description provided in Section D.2, item (g)(1), it is clear that the Truck and Rail Receiving Area (P2) are not controlled by Baghouse C1. In Condition D.2.3(a), Unit P2 should be removed from the table. Truck and Railcar Receiving should be removed from the monitoring since the C1 Baghouse does not control P2 emissions as described above.

IDEM Response:

IDEM has revised Conditions D.2.1, D.2.3, and D.2.5 as follows:

D.2.1 PSD Minor Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

(a) The PM, PM_{10}, and $PM_{2.5}$ emissions from the following emission units shall be limited as follows:

Unit ID	Unit Description	Control Device	PM Emission Limit (lbs/hr)	PM_{10} Emission Limit (lbs/hr)	$PM_{2.5}$ Emission Limit (lbs/hr)
P24	North Truck Receiving	Baghouse C24	0.43	0.43	0.43
P4	Soybean Cleaning	Baghouse C4	0.81	0.81	0.81
P1	**Truck Soybean Receiving**	**Baghouse C1**	**0.56**	**0.56**	**0.56**

(b) The total grain received at P1 and P2 combined shall not exceed 1,020,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(c) The total grain received at the north house bin loading area, identified as P27, shall not exceed 108,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(d) The PM, PM_{10}, and $PM_{2.5}$ emissions from the following emission units shall be limited as follows:

Unit ID	Unit Description	Control Device	PM Emission Limit (lbs/ton)	PM_{10} Emission Limit (lbs/ton)	$PM_{2.5}$ Emission Limit (lbs/ton)
P27	North House Bin Loading	None	0.061	0.034	0.0058
~~P1~~ P2	~~Truck Soybean Receiving~~ Truck and Railcar Receiving	~~oil application system, enclosure,~~ **restricting vehicles unloading grain to trucks with choke unloading applications**~~, and Baghouse C1~~	0.035	0.0078	0.00013
P2A	Annex Silo Storage	oil application system	0.025	0.0063	0.0011
P2A	Annex Silo Loading	oil application system	0.061	0.034	0.0058
P2B	Soybean Storage	oil application system	0.025	0.0063	0.0011
P2B	Soybean Loading	oil application system	0.061	0.034	0.0058

Compliance with these limits, in combination with the limits in Conditions D.1.2, D.3.1, and D.4.1 and the potential to emit from other units at the source, shall limit the potential to emit PM, PM_{10}, and $PM_{2.5}$ from the entire source to less than 250 tons per twelve (12) consecutive month period, each. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

D.2.3 Particulate Control

(a) In order to ensure compliance with Condition D.2.1, each of the following emission units shall be controlled by the associated baghouse, as listed in the table below, when these units are in operation:

Unit ID	Unit Description	Baghouse ID
P24	North Truck Receiving	C24
P4	Soybean Cleaning	C4
P1	Truck Soybean Receiving	C1

Unit ID	Unit Description	Baghouse ID
~~P2~~	~~Truck and Railcar Receiving~~	

(b) In order to ensure compliance with Conditions D.2.1(a) and D.2.1(d), dust control oil shall be applied on all soybeans handled by emission units identified as P1, P2, P2A, P2B, and P4.

(c) **In order to ensure compliance with Conditions D.2.1(a) and D.2.1(d), vehicles unloading grain (Units P1 and P2) shall be restricted to grain to hopper-bottom rail cars or trucks with choke unloading applications.**

(d) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.2.5 Parametric Monitoring [40 CFR 64]

Pursuant to 40 CFR 64 (CAM), the Permittee shall record the pressure drop across the baghouses used in conjunction with the north truck receiving (P24), the truck receiving (P1) ~~and Truck and Railcar Receiving (P2)~~, and the soybean cleaning (P4) operations, at least once per day when the any of these operations is in operation. When, for any one reading, the pressure drop across the baghouse is outside of the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 7.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The 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 or replaced at least once every six (6) months.

Company Comment 3:

The table provided in Condition D.3.1(a) should be retained as it appears in permit # 129-29557-00035. There are two stacks associated with operation P19. The first stack is P19 which is controlled by Baghouses C19A, C19B, and C19C. The other stack is P19D controlled by Baghouse C19D. Because there are two stacks with different emission rates that may operate independently, these units should not be combined into one emission limit.

IDEM Response:

IDEM concurrs. Condition D.3.1 has been revised as follows:

D.3.1 PSD Minor Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

(a) The PM, PM_{10}, and $PM_{2.5}$ emissions from the following emission unit shall be limited as follows:

Unit ID	Unit Description	Control Device	PM Emission Limit (lbs/hr)	PM_{10} Emission Limit (lbs/hr)	$PM_{2.5}$ Emission Limit (lbs/hr)
P5	Soybean Cracking/Dehulling	Cyclones C5A-H	21.94	21.94	21.94
P19	Soybean Flaking	Baghouses C19A-C ~~and/or~~	**0.39**~~1.11~~	**0.39**~~1.11~~	**0.39**~~1.11~~
		Baghouse C19D	**0.72**	**0.72**	**0.72**
P10	DTDC Meal Dryer #1	Cyclone C10	5.39	5.39	5.39
P11	DTDC Meal Dryer #2	Cyclone C11	0.13	0.13	0.13
P12	DTDC Meal Dryer #3	Cyclone C12	0.10	0.10	0.10
P12A	DTDC Meal Cooler	Cyclone C12A	0.22	0.22	0.22

(b) The total grain processed at this source shall not exceed 940,240 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(c) The PM emissions from the soybean heater (P21) shall not exceed 0.001 pounds per ton of grain processed.

(d) The PM_{10} emissions from the soybean heater (P21) shall not exceed 0.001 pounds per ton of grain processed.

(~~d~~**e**) The $PM_{2.5}$ emissions from the soybean heater (P21) shall not exceed 0.001 pounds per ton of grain processed.

Compliance with these limits, in combination with the limits in Conditions D.1.2, D.2.1, and D.4.1 and the potential to emit from other units at the source, shall limit the potential to emit PM, PM_{10}, and $PM_{2.5}$ from the entire source to less than 250 tons per twelve (12) consecutive month period, each. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

Company Comment 4:

CGB requests that the requirement to perform compliance testing on Soybean Flaking (P19) be clarified to indicate that testing is required for Stack P19D only. Normal Soybean Flaking operations are performed while only Baghouse C19D is in operation, with Baghouses C19A, C19B, and C19C used as backup units in situations where Baghouse C19D is out of service, such as to replace bag filters in the control device.

IDEM Response:

Testing is not required for Stack 19 when utilizing Baghouses C19A, C19B, and C19C, since compliance with the emission limitation for these control devices has already been verified by stack testing in November of 1999. IDEM has clarified Condition D.3.7 as follows:

D.3.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Conditions D.3.1 and D.3.2, the Permittee shall perform PM, PM_{10}, and $PM_{2.5}$ testing for the soybean cracking and dehulling operation (P5) and Soybean Flaking (P19**, stack P19D**) utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. ~~Testing on Stack P19D shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration for P19. Testing on Stack P19 shall be conducted within 180 days of start-up of the alternate operating scenario in which Baghouses C19A, C19B, and C19C are utilized for particulate control from the Soybean Flaking Operations (P19).~~ PM_{10} and $PM_{2.5}$ include filterable and condensible PM.

(b) In order to demonstrate compliance with Condition D.3.3, the Permittee shall perform VOC testing for the soybean oil extraction system (P13) and the DTDC meal dryers (P10 and P11) utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration.

(c) In order to demonstrate compliance with Condition D.3.3(b) and (c), the Permittee shall perform VOC testing for the DTDC meal dryer section 3 (P12) and the DTDC meal cooler (P12A) when P12 and P12A are in operation utilizing methods as approved by the Commissioner. Testing on P12 and P12A shall be repeated in conjunction with testing on P10 and P11 at least once every five (5) years from the date of the most recent valid compliance demonstration for P10 and P11.

(d) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C- Performance Testing contains the Permittee's obligations with regard to the performance testing required by this condition.

Company Comment 5:

In Condition D.4.1, the allowable limit for Unit P9 should be 0.26 lb/hr for PM, PM_{10}, and $PM_{2.5}$.

IDEM Response:

IDEM, OAQ agrees. The changes to Condition D.4.1 are as follows:

D.4.1 PSD Minor Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the PM, PM_{10}, and $PM_{2.5}$ emissions from the following emission units shall be limited as follows:

Unit ID	Unit Description	Control Device	PM Emission Limit (lbs/hr)	PM_{10} Emission Limit (lbs/hr)	$PM_{2.5}$ Emission Limit (lbs/hr)
P3	Kaolin Handling	Baghouse C3	0.10	0.10	0.10
P6	Hull Grinding	Baghouse C6	0.30	0.30	0.30
P7	Hull Storage	Baghouse C7	0.17	0.17	0.17
P7A or P7B	Hull Handling	Baghouse C7A	0.17	0.17	0.17
P8	Hull Pellet Cooler	Cyclone C8	5.14	5.14	5.14
P8A or P8B	Hull Pellet Storage	Baghouse C8A or Bin Vent Filter System C8B	0.17	0.17	0.17
~~P9~~	~~Meal Handling~~	~~Baghouse C9~~	~~0.56~~	~~0.56~~	~~0.56~~

Unit ID	Unit Description	Control Device	PM Emission Limit (lbs/hr)	PM_{10} Emission Limit (lbs/hr)	$PM_{2.5}$ Emission Limit (lbs/hr)
P9	**Meal Handling**	**Baghouse C9**	**0.26**	**0.26**	**0.26**
P20	Meal Storage	Baghouse C20	0.26	0.26	0.26
P14	Truck Meal Loadout	Baghouse C14	0.69	0.69	0.69
P15	Barge/Railcar Meal Loadout	Baghouses C15	0.69	0.69	0.69

Compliance with these limits, in combination with the limits in Conditions D.1.2, D.2.1, and D.3.1 and the potential to emit from other units at the source, shall limit the potential to emit PM, PM_{10}, and $PM_{2.5}$ from the entire source to less than 250 tons per twelve (12) consecutive month period, each. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

Company Comment 6:

Condition D.4.5(a) should read "... shall be controlled by the associated baghouse **or cyclone**, as listed in the table below, when these units are in operation." Alternatively, Unit P8 could be removed from the table in D.4.5(a).

IDEM Response:

IDEM has clarified Condition D.4.5 as follows:

D.4.5 Particulate Control

(a) In order to ensure compliance with Conditions D.4.1, D.4.2, and D.4.3, each of the following emission units shall be controlled by the associated baghouse **or cyclone**, as listed in the table below, when these units are in operation:

Unit ID	Unit Description	Control Device
P3	Kaolin Handling	Baghouse C3
P6	Hull Grinding	Baghouse C6
P7	Hull Storage	Baghouse C7
P7A & P7B	Hull Handling	Baghouse C7A
P8	Hull Pellet Cooler	Cyclone C8
P8A or P8B	Hull Pellet Storage	Baghouse C8A or Bin Vent Filter System C8B
P9	Meal Handling	Baghouse C9
P20	Meal Storage	Baghouse C20
P14	Truck Meal Loadout	Baghouse C14
P15	Barge/Railcar Meal Loadout	Baghouses C15

(b) ...

Company Comment 7:

The Quarterly Report on page 80 should be changes to say "Facility" Grain Processing" and "Parameter: Total Grain Processed" per Condition D.3.1(b) requirements. The Quarterly report form on page 79 is for the Grain Receiving throughput limit.

IDEM Response:

IDEM has clarified the quarterly report as follows:

Part 70 Quarterly Report

Facility:	Grain ~~Receiving~~ **Processing** Facilities
Parameter:	Total Grain ~~Received~~ **Processed**
Limit:	Less than 940,240 tons per twelve (12) consecutive month period with compliance determined at the end of each month

Company Comment 8:

Calculations in Appendix A of the TSD should be updated as necessary to reflect the above comments.

IDEM Response:

The revised PTE calculations are included as Appendix A.

Other Changes

Upon further review, the OAQ has decided to make the following revisions to the permit:

Change No. 43 IDEM, OAQ has updated Condition E.1.2 to clarify the applicable requirements of the Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units [40 CFR Part 60, Subpart Dc] with regard to fuel certification requirements:

E.1.2 Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units [40 CFR 60, Subpart Dc] [326 IAC 12]

Pursuant to 40 CFR 60, Subpart Dc, the Permittee shall comply with the provisions of Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, which are incorporated by reference as 326 IAC 12, (included as Attachment A of this permit) as specified as follows:

(a) 40 CFR 60.40c;
(b) 40 CFR 60.41c;
(c) 40 CFR 60.43c(b), (c), (d), (e)(1), (e)(2), (e)(3);
(d) 40 CFR 60.45c**(a), (b), (c)**;
(e) 40 CFR 60.47c(a), (b), (d), (e), (g); and
(f) 40 CFR 60.48c(a), (c), ~~(f)(4),~~ (g), (h), (i), (j).

Recommendation

The staff recommends to the Commissioner that the Part 70 Operating Permit Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 31, 2011. Additional information was received on November 18, 2011, December 2, 2011, December 19, 2011, December 27, 2011, February 22, 2012, March 2, 2012, March 14, 2012, April 30, 2012, May 4, 2012, May 9, 2012, May 30, 2012, August 9, 2012, and August 23, 2012.

Conclusion

The operation of this stationary soybean oil extraction plant shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. 129-31079-00035.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Kimberly Cottrell at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-0870 or toll free at 1-800-451-6027 extension 3-0870.

(b) A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Indiana Department of Environmental Management
Office of Air Quality

Appendix A – REVISED Emission Calculations
Technical Support Document (TSD)
Part 70 Operating Permit Renewal

Source Description and Location

Company Name:	Consolidated Grain and Barge Co.
Address City IN Zip:	2781 Bluff Road, Mt. Vernon, Indiana 47620
County:	Posey
SIC / NAICS Code:	2075 311222
Permit Number:	T129-31079-00035
Permit Reviewer:	Kimberly Cottrell
Date:	November 14, 2012

Summary of Potential to Emit

The following table summarizes the revised potential to emit calculations for the Consolidated Grain and Barge Co., as corrected by the Addendum to the Technical Support Document. The subsequent pages of this document contain the revised calculations for certain processes at the Consolidated Grain and Barge Co.

Potential to Emit after Issuance of Permit (Limited PTE) (tpy)

		Regulated Pollutants								HAPs - Organics									HAPs - Metals		
Emission Unit/Process	**Unit IDs**	**CO**	**NO_X**	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**VOC**	**GHGs as CO_2e**	**Acrolein**	**Benzene**	**1,3 Butadiene**	**Ethyl Benzene**	**Formal-dehyde**	**Hexane**	**HCl**	**PAH**	**Styrene**	**Lead**	**Mercury**	**Total HAP**
Point Sources																					
Natural Gas Fired Boilers	P17, P18, & P18A	36.47	43.41	0.82	3.30	3.30	0.26	2.39	++	--	9.1E-04	--	--	3.3E-02	0.78	--	--	--	2.2E-04		0.82
Wood/Tires Boilers	P17B & P17C	83.00	182.60	10.38	17.43	14.53	47.73	7.06	82,780	1.33	4.66	0.24	0.72	1.46	--	6.31	7.90	1.59	7.4E-04	1.1E-04	24.21
North Truck Receiving	P24	--	--	1.88	1.88	1.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Kaolin Handling	P3	--	--	0.45	0.45	0.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Soybean Cleaning	P4	--	--	3.57	3.57	3.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Soybean Cracking/Dehulling	P5	--	--	96.11	96.11	96.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hull Grinding	P6	--	--	1.31	1.31	1.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hull Storage	P7	--	--	0.75	0.75	0.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hull Handling	P7A	--	--	0.75	0.75	0.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hull Pellet Cooler	P8	--	--	22.53	22.53	22.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hull Pellet Storage	P8A	--	--	0.75	0.75	0.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Soybean Flaking	P19	--	--	1.71	1.71	1.71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Meal Handling	P9	--	--	1.13	1.13	1.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Meal Storage	P20	--	--	1.13	1.13	1.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Truck Meal Loadout	P14	--	--	3.00	3.00	3.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Rail/Barge Meal Loadout	P15	--	--	3.00	3.00	3.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Soybean Oil Extraction System	P13	--	--	--	--	--	--	39.49	--	--	--	--	--	--	314.16	--	--	--			314.16
DTDC Meal Dryer Section 1	P10	--	--	23.60	23.60	23.60	--		--	--	--	--	--	--		--	--	--			
DTDC Meal Dryer Section 2	P11	--	--	0.56	0.56	0.56	--	75.22	--	--	--	--	--	--	1,243	--	--	--			1,243
DTDC Meal Dryer Section 3	P12	--	--	0.43	0.43	0.43	--		--	--	--	--	--	--		--	--	--			
DTDC Meal Cooling Operation	P12A	--	--	0.95	0.95	0.95	--	75.22	--	--	--	--	--	--	1,243	--	--	--			1,243
Diesel Fired Fire Pumps (Emergency)	NA	1.01	4.71	0.33	0.33	0.33	0.31	0.38	175.66	9.87E-05	9.96E-04	4.17E-05	--	1.26E-03	--	--	1.79E-04	--			4.14E-03
Natural Gas Fired Emergency Generator	NA	0.11	0.93	1.12E-02	1.41E-02	1.41E-02	1.72E-04	3.51E-02	41.10	2.28E-03	5.67E-04	--	--	1.61E-02	1.30E-04	--	--	1.60E-05			1.79E-02
Natural Gas Fired Heaters	NA	0.16	0.19	3.59E-03	1.44E-02	1.44E-02	1.13E-03	1.04E-02	228.11	--	4.0E-06	--	--	1.4E-04	3.40E-03	--	--	--	9.4E-07		3.57E-03
Subtotal (Point Source Emissions)		120.75	231.84	175.15	184.70	181.79	48.30	199.80	83,225	1.33	4.66	0.24	0.72	1.51	2,800	6.31	7.90	1.59	9.61E-04	1.09E-04	2,825
Fugitive Emissions that are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability																					
Truck Receiving	P1	--	--	2.44	2.44	2.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Truck and Railcar Receiving	P2	--	--	7.14	7.14	7.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Annex Silo Loading	P2A	--	--	12.44	6.94	1.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Soybean Loading	P2B	--	--	12.44	6.94	1.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
North House Bin Loading	P27	--	--	0.99	0.55	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Subtotal (Counted Fugitive Emissions)		--	--	35.46	24.00	12.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

[+] The emissions from P1 and P2 are limited to a total combined throughput of 1,020,000 tons per 12 months.

Other Fugitive Emissions																					
Annex Silo Storage	P2A	--	--	5.10	1.29	0.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Soybean Storage	P2B	--	--	5.10	1.29	0.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Soybean Heater	P21	--	--	0.47	0.47	0.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Unpaved Roads	NA	--	--	0.677	0.183	0.018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Paved Roads	NA	--	--	6.180	1.236	0.303	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Grain Storage Piles	NA	--	--	0.532	0.532	0.532	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Degreasing Operations	NA	--	--	--	--	--	--	0.59	--	--	--	--	--	--	--	--	--	--	--	--	--
Subtotal (Other Fugitive Emissions)		--	--	18.06	4.99	1.77	--	0.59	--	--	--	--	--	--	--	--	--	--	--	--	--
Source Total (All Units)		*120.75*	*231.84*	*228.67*	*213.69*	*195.60*	*48.30*	*200.39*	*83,225*	*1.33*	*4.66*	*0.24*	*0.72*	*1.51*	*2,800*	*6.31*	*7.90*	*1.59*	*9.61E-04*	*1.09E-04*	*2,825*
Source Total ("Counted" Units)		**120.75**	**231.84**	**210.61**	**208.70**	**193.83**	**48.30**	**199.80**	**83,225**	**1.33**	**4.66**	**0.24**	**0.72**	**1.51**	**2,800**	**6.31**	**7.90**	**1.59**	**9.6E-04**	**1.1E-04**	**2,825**
Part 70 Major Source Thresholds		100	100	100	100	100	100	100	100,000	10	10	10	10	10	10	10	10	10	10	10	25
PSD Major Source Thresholds		250	250	250	250	250	250	250	100,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.6	0.1	NA

[+]The emissions from P1 and P2 are limited to a total combined throughput of 1,020,000 tons per 12 months.
[++]The CO_2e emissions from the boilers are limited by a total equivalent dry wood input limit of 51,875 tons per 12 months.

Summary of Unrestricted Potential To Emit

		Regulated Pollutants								HAPs - Organics									HAPs - Metals			
Emission Unit/Process	**Unit IDs**	**CO**	**NO_X**	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**VOC**	**GHGs as CO_2e**	**Acrolein**	**Benzene**	**1,3 Butadiene**	**Ethyl-benzene**	**Formal-dehyde**	**Hexane**	**HCl**	**PAH**	**Styrene**	**Cadmium**	**Lead**	**Mercury**	**Total HAP**
Point Sources																						
Natural Gas Fired Boilers	P17, P18, & P18A	36.47	43.41	0.82	3.30	3.30	0.26	2.39	52,413	--	9.1E-04	--	--	3.3E-02	0.78	--	--	--	4.8E-04	2.2E-04	--	0.82
Wood/Tires Boilers	P17B & P17C	100.39	220.86	151	253	211	57.72	8.53	100,124	1.33	4.66	0.24	0.72	1.46	--	6.31	7.90	1.59	7.7E-03	7.4E-04	1.1E-04	24.21
North Truck Receiving	P24	--	--	187.71	187.71	187.71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Kaolin Handling	P3	--	--	45.05	45.05	45.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Soybean Cleaning	P4	--	--	356.66	356.66	356.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Soybean Cracking/Dehulling	P5	--	--	9,611	9,611	9,611	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hull Grinding	P6	--	--	131.40	131.40	131.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hull Storage	P7	--	--	75.09	75.09	75.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hull Handling	P7A	--	--	75.09	75.09	75.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hull Pellet Cooler	P8	--	--	2,253	2,253	2,253	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hull Pellet Storage	P8A	--	--	75.09	75.09	75.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Soybean Flaking	P19	--	--	170.82	170.82	170.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Meal Handling	P9	--	--	113.16	113.16	113.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Meal Storage	P20	--	--	112.63	112.63	112.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Truck Meal Loadout	P14	--	--	300.34	300.34	300.34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Rail/Barge Meal Loadout	P15	--	--	300.34	300.34	300.34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Soybean Oil Extraction System	P13	--	--	--	--	--	--	1,331	--	--	--	--	--	--	1,331	--	--	--	--	--	--	1,331
DTDC Meal Dryer Section 1	P10	--	--	90.67	90.67	90.67	--	1,331	--	--	--	--	--	--	1,331	--	--	--	--	--	--	1,331
DTDC Meal Dryer Section 2	P11	--	--	90.67	90.67	90.67	--	1,331	--	--	--	--	--	--	1,331	--	--	--	--	--	--	1,331
DTDC Meal Dryer Section 3	P12	--	--	90.67	90.67	90.67	--	1,331	--	--	--	--	--	--	1,331	--	--	--	--	--	--	1,331
DTDC Meal Cooling Operation	P12A	--	--	95.70	95.70	95.70	--	1,331	--	--	--	--	--	--	1,331	--	--	--	--	--	--	1,331
Diesel Fired Fire Pumps (Emergency)	NA	1.01	4.71	0.33	0.33	0.33	0.31	0.38	175.66	9.87E-05	9.96E-04	4.17E-05	--	1.3E-03	--	--	1.8E-04	--	--	--	--	4.1E-03
Natural Gas Fired Emergency Generator	NA	0.11	0.93	1.12E-02	1.41E-02	1.41E-02	1.72E-04	3.51E-02	41.10	2.28E-03	5.67E-04	--	--	1.6E-02	1.3E-04	--	--	1.6E-05	--	--	--	1.8E-02
Natural Gas Fired Heaters	NA	0.16	0.19	0.00	0.01	0.01	0.00	0.01	228	--	4.0E-06	--		1.4E-04	0.00	--	--	--	2.1E-06	9.4E-07	--	0.00
Subtotal (Point Source Emissions)		138.14	270.09	14,326	14,431	14,389	58.30	6,669	152,982	1.33	4.66	0.24	0.72	1.51	6,658	6.31	7.90	1.59	8.2E-03	9.6E-04	1.1E-04	6,682
Fugitive Emissions that are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability																						
Truck Receiving	P1	--	--	244.03	244.03	244.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Truck and Railcar Receiving	P2	--	--	82.78	18.45	0.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Annex Silo Loading	P2A	--	--	464.89	259.12	44.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Soybean Loading	P2B	--	--	160.31	89.35	15.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
North House Bin Loading	P27	--	--	96.18	53.61	9.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Subtotal (Counted Fugitive Emissions)		--	--	1,048.20	664.56	312.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Other Fugitive Emissions																						
Annex Silo Storage	P2A	--	--	190.53	48.01	8.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Soybean Storage	P2B	--	--	65.70	16.56	2.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Soybean Heater	P21	--	--	0.50	0.50	0.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Unpaved Roads	NA	--	--	0.677	0.183	0.018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Paved Roads	NA	--	--	6.180	1.236	0.303	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Grain Storage Piles	NA	--	--	0.532	0.532	0.532	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Degreasing Operations	NA	--	--	--	--	--	--	0.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Subtotal (Other Fugitive Emissions)		--	--	264.12	67.02	12.63	--	0.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Source Total (All Units)		*138.14*	*270.09*	*15,639*	*15,163*	*14,715*	*58.30*	*6,669*	*152,982*	*1.33*	*4.66*	*0.24*	*0.72*	*1.51*	*6,658*	*6.31*	*7.90*	*1.59*	*8.2E-03*	*9.6E-04*	*1.1E-04*	*6,682*
Source Total ("Counted" Units)		**138.14**	**270.09**	**15,375**	**15,096**	**14,702**	**58.30**	**6,669**	**152,982**	**1.33**	**4.66**	**0.24**	**0.72**	**1.51**	**6,658**	**6.31**	**7.90**	**1.59**	**8.2E-03**	**9.6E-04**	**1.1E-04**	**6,682**

Natural Gas Fired Boilers

P17, P18, & P18A

Boilers <100 MMBtu/hr

Emission Unit	Heat Input Capacity		Potential Throughput	Installation Date
NG Boiler P17	33.70	MMBtu/hr	289.42 MMCF/yr	1996
NG Boiler P18	33.70	MMBtu/hr	289.42 MMCF/yr	1996
NG Boiler P18A	33.70	MMBtu/hr	289.42 MMCF/yr	1996
Maximum Capacity:	101.10	MMBtu/hr	868 MMCF/yr	

	Potential To Emit - Regulated Pollutants							Potential To Emit - Greenhouse Gases			
								1	*21*	*310*	***GWP***
	CO	**NO_X**	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**VOC**	**CO_2**	**CH_4**	**N_2O**	**CO_2e**
Emission Factor (lb/MMCF)	*84*	*100*	*1.9*	*7.6*	*7.6*	*0.6*	*5.5*	*120,000*	*2.3*	*2.2*	*120,730*
Uncontrolled Potential To Emit (lb/hr)	8.33	9.91	0.19	0.75	0.75	0.06	0.55	11,894	0.23	0.22	11,967
Uncontrolled Potential To Emit (ton/yr)	36.47	43.41	0.82	3.30	3.30	0.26	2.39	52,096	1.00	0.96	52,413

PM emission factor is filterable PM only. PM_{10} emission factor is filterable and condensable PM_{10} combined. $PM_{2.5}$ emission factor is filterable and condensable $PM_{2.5}$ combined.

Emission Factors for NO_X: Uncontrolled = 100, Low NO_X Burner = 50, Low NO_X Burners/Flue gas recirculation = 32

	Potential To Emit - Hazardous Air Pollutants										
	HAPs - Organics					HAPs - Metals					
	Benzene	**Dichloro-benzene**	**Formal-dehyde**	**Hexane**	**Toluene**	**Cadmium**	**Chromium**	**Lead**	**Manganese**	**Nickel**	**Total HAPs**
Emission Factor (lb/MMCF)	*2.1E-03*	*1.2E-03*	*7.5E-02*	*1.8*	*3.4E-03*	*1.1E-03*	*1.4E-03*	*5.0E-04*	*3.8E-04*	*2.1E-03*	
Uncontrolled Potential To Emit (lb/hr)	2.1E-04	1.2E-04	7.4E-03	0.18	3.4E-04	1.1E-04	1.4E-04	5.0E-05	3.8E-05	2.1E-04	0.19
Uncontrolled Potential To Emit (ton/yr)	9.1E-04	5.2E-04	3.3E-02	0.78	1.5E-03	4.8E-04	6.1E-04	2.2E-04	1.6E-04	9.1E-04	0.82

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

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/1,020 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
Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
The N_2O Emission Factor for uncontrolled is 2.2. The N_2O Emission Factor for low Nox burner is 0.64.
CO_2e (ton/yr) = CO_2 Potential Emission (ton/yr) x CO_2 GWP + CH4 Potential Emission (ton/yr) x CH_4 GWP + N_2O Potential Emission (ton/yr) x N_2O GWP
Potential to Emit (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lbs/MMCF) x 1 ton/2000 lbs

Wood/Tires Boilers

Combustion of 80% Dry Wood and 20% Shredded Tires

P17B & P17C

Boilers <100 MMBtu/hr

Emission Unit	Heat Input Capacity		Installation Date
wood/shredded tire Boiler P17B	57.30	MMBtu/hr	2006
wood/shredded tire Boiler P17C	57.30	MMBtu/hr	2006
Maximum Capacity:	114.6	MMBtu/hr	1,003,896 MMBtu/yr

Fuel Equivalency Evaluatior *Source: SSM: 129-22782-00035, issued 10/20/2006*

	Usage Limits	Heating Value
wood	51,875 tons dry wood/yr @ 0% Moisture	16 MMBtu/ton wood
tires	7,410 tons tires/yr	32 MMBtu/ton tires

2.0 tons dry wood / ton tires = 32 MMBtu/ton tires / 16 MMBtu/ton wood

	Potential To Emit - Regulated Pollutants							Potential To Emit - Greenhouse Gases			
								1	*21*	*310*	***GWP***
	CO	**NO_X**	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**VOC**	**CO_2**	**CH_4**	**N_2O**	**CO_2e**
Current Permitted Emission Rate (lb/MMBtu)	0.2	0.44	0.025	0.042	0.035	0.115	0.017	195	0.021	0.013	*199.47*
1.) Current Permitted Potential To Emit (ton/yr	83.00	182.60	10.38	17.43	14.53	47.73	7.06	80,925	8.72	5.40	**82,780**
AP-42 Emission Rate (lb/MMBtu)	*0.6*	*0.49*	*0.054*	*0.04*	*0.035*	*0.025*	*0.017*	*195*	*0.021*	*0.013*	*199.47*
Tested Emission Rate (lb/MMBtu) [80% Wood & 20% Tires]	0.054	0.302	0.013	0.015		0.111	0.014				
Tested Emission Rate (lb/MMBtu) [100% Wood	0.069	0.350	0.006	0.008		0.013	0.016				
Control Efficiency (%)			91.67%	91.67%	91.67%						
New Permitted Emission Rate (lb/MMBtu)	**0.20**	**0.44**	**0.025**	**0.042**	**0.035**	**0.115**	**0.017**	**195**	**0.021**	**0.013**	***199.47***
Controlled Potential To Emit (lb/hr)	22.92	50.42	2.87	4.81	4.01	13.18	1.95	22,347	2.41	1.49	22,859
Controlled Potential To Emit (ton/yr	100.39	220.86	12.55	21.08	17.57	57.72	8.53	97,880	10.54	6.53	100,124
Uncontrolled Potential To Emit (lb/hr)	22.92	50.42	34.39	57.78	48.15	13.18	1.95	22,347	2.41	1.49	22,859
Uncontrolled Potential To Emit (ton/yr	100.39	220.86	150.64	253.08	210.90	57.72	8.53	97,880	10.54	6.53	100,124
2.) Controlled & Limited Potential To Emit (ton/yr	83.00	182.60	10.38	17.43	14.53	47.73	7.06	80,925	8.72	5.40	82,780

Notes:

PM emission factor is filterable PM only. PM_{10} emission factor is filterable and condensable PM_{10} combined. $PM_{2.5}$ emission factor is filterable and condensable $PM_{2.5}$ combined.
The emission factors for SO_2 and NOx were provided by the source which were estimated using the stack test results from similar sources. Using 20% tire is the worst case scenario for $_2$ emissions. Using 100% wood is the worst case scenario for NOx emissions. The Permittee is required to perform stack tests to demonstrate compliance with these emission factors.
The emission factors for condensible PM_{10}, CO, and VOC are from AP-42, Tables 1.6-2 and 1.6-3 (09/03) for dry wood combustion (09/03).
All emission factors are based on normal firing. MMBtu = 1,000,000 Btu MMCF = 1,000,000 Cubic Feet of Gas

Methodology

Potential Throughput (pallets/yr) = Heat Input Capacity (MMBtu/yr) / [0.0052 MMBtu/lb pallets x 65 lb/pallet]
1.) Current Permitted Potential to Emit (ton/yr) = Current Permitted Emission Rate (lb/MMBtu) x Dry Wood Equivalent Limit (51,875 tons/yr) x Wood Heating Value (16 MMBtu/ton) / 2000 lb/ton
2.) Controlled & Limited Potential to Emit (ton/yr) = New Permitted Emission Rate (lb/MMBtu) x Dry Wood Equivalent Limit (51,875 tons/yr) x Wood Heating Value (16 MMBtu/ton) / 2000 lb/ton
Emission (lb/hr) = Heat Input Capacity (MMBtu/hr) x Emission Factor (lb/MMBtu)
Emission (tons/yr) = Emission (lb/hr) x 8760 hr/yr /2000 lb/ton
Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
The N_2O Emission Factor for uncontrolled is 2.2. The N_2O Emission Factor for low Nox burner is 0.64.
CO_2e Emission Factor (lb/MMBtu) = CO_2 Emission Factor (lb/MMBtu) x CO_2 GWP + CH4 Emission Factor (lb/MMBtu) x CH_4 GWP + N_2O Emission Factor (lb/MMBtu) x N_2O GWP
CO_2e (ton/yr) = CO_2 Potential Emission (ton/yr) x CO_2 GWP + CH4 Potential Emission (ton/yr) x CH_4 GWP + N_2O Potential Emission (ton/yr) x N_2O GWP

Fuel Equivalency Revisior

Previous Limit was 8.75 tons dry wood per MMCF natural gas in order for CO to be limited to less than 250 tons per year. After testing, the new emission rate revealed that the equivalency is not needed to limit CO emissions; however, a new equivalency is needed in order to limit CO_2e less than 100,000 tons per year.
This calculations is as follows:

$$\frac{37.8\ \text{tons wood}}{\text{MMCF nat. gas}} = \frac{120{,}730\ \text{lb } CO_2e}{\text{MMCF nat. gas}} \Big/ \left(\frac{16\ \text{MMBtu}}{\text{ton wood}} \times \frac{199.47\ \text{lb } CO_2e}{\text{MMBtu}}\right)$$

	Potential To Emit - Hazardous Air Pollutants																Total HAPs
	HAPs - Organics								HAPs - Metals								
	Acrolein	Benzene	1,3-butadiene	Ethyl Benzene	Formal-dehyde	HCl	Styrene	PAH	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	
Emission Factor (lb/MMBtu dry wood)	4.0E-03	4.2E-03			4.4E-03	1.9E-02	1.9E-03		1.8E-06	1.8E-06	1.8E-06	1.8E-06	1.8E-06	3.3E-07	1.8E-06	1.8E-06	
Emission Factor (lb/ton tires		4.41	0.32	0.97			1.29	10.67			9.6E-03		2.0E-04				
Control Efficiency (%)									91.67%	91.67%	91.67%	91.67%	91.67%	91.67%	91.67%	91.67%	
Controlled Potential To Emit (lb/hr)	0.30	1.06	0.05	0.16	0.33	1.44	0.36	1.80	1.1E-05	1.1E-05	1.5E-04	1.1E-05	1.4E-05	2.1E-06	1.1E-05	1.1E-05	5.53
Controlled Potential To Emit (ton/yr	1.33	1.72	0.02	0.07	1.46	6.31	0.73	0.79	5.0E-05	5.0E-05	1.1E-04	5.0E-05	5.1E-05	9.1E-06	5.0E-05	5.0E-05	12.43
Uncontrolled Potential To Emit (lb/hr)	0.30	1.06	0.05	0.16	0.33	1.44	0.36	1.80	1.4E-04	1.4E-04	1.8E-03	1.4E-04	1.7E-04	2.5E-05	1.4E-04	1.4E-04	5.53
Uncontrolled Potential To Emit (ton/yr	1.33	4.66	0.24	0.72	1.46	6.31	1.59	7.90	6.0E-04	6.0E-04	7.7E-03	6.0E-04	7.4E-04	1.1E-04	6.0E-04	6.0E-04	24.21
2.) Controlled & Limited Potential To Emit (ton/yr	1.33	4.66	0.24	0.72	1.46	6.31	1.59	7.90	6.0E-04	6.0E-04	7.7E-03	6.0E-04	7.4E-04	1.1E-04	6.0E-04	6.0E-04	24.21

Notes:
HAP Emission factors for dry wood combustion are from AP-42, Table 1.6-3 for Wood Residue Combustion (09/03). HAP emissions for combustion of painted pallets is derived from testing that was conducted by the source (see below). The HAP emission factors for tire combustion are unknown.

Methodology
Controlled Potential Emissions (lb/hr) = [{ (0.8 x Wood Emission Factor (lb/MMBtu) x Wood Heat Input Capacity (MMBtu/ton) x Limited Dry Wood Equivalent Usage (ton/yr)) / 8760 hr/yr }] + { (0.2 x Tires Emission Factor (lb/ton) x Limited Tire Usage (ton/yr)) / 8760 hr/yr }] x (1 - CE (%))
Controlled Potential Emissions (ton/yr) = [{ (0.8 x Wood Emission Factor (lb/MMBtu) x Wood Heat Input Capacity (MMBtu/ton) x Limited Dry Wood Equivalent Usage (ton/yr)) / 2000 lb/ton }] + { (0.2 x Tires Emission Factor (lb/ton) x Limited Tire Usage (ton/yr)) / 2000 lb/ton }] x (1 - CE (%))
Uncontrolled Potential Emissions (lb/hr) = [{ (0.8 x Wood Emission Factor (lb/MMBtu) x Wood Heat Input Capacity (MMBtu/ton) x Limited Dry Wood Equivalent Usage (ton/yr)) / 8760 hr/yr }] + { (0.2 x Tires Emission Factor (lb/ton) x Limited Tire Usage (ton/yr)) / 8760 hr/yr }]
Uncontrolled Potential Emissions (ton/yr) = [{ (0.8 x Wood Emission Factor (lb/MMBtu) x Wood Heat Input Capacity (MMBtu/ton) x Limited Dry Wood Equivalent Usage (ton/yr)) / 2000 lb/ton }] + { (0.2 x Tires Emission Factor (lb/ton) x Limited Tire Usage (ton/yr)) / 2000 lb/ton }]
Limited Potential Emissions (ton/yr) = [{ (0.8 x Wood Emission Factor (lb/MMBtu) x Wood Heat Input Capacity (MMBtu/ton) x Limited Dry Wood Equivalent Usage (ton/yr)) / 2000 lb/ton }] + { (0.2 x Tires Emission Factor (lb/ton) x Limited Tire Usage (ton/yr)) / 2000 lb/ton }]

Painted Pallet Combustion Source: Administrative Amendment No. 129-26154-00038
The following emission calculations assume the worst case that the pallets are entirely and freshly covered by paint. A representative wet sample of the paint used on the pallets was sent by the source for Laboratory testing for metal HAPs. Given that the paint may have been on the pallets for years, there should be no VOC and given the boiler temperatures any VOC would be burned up if there were any trace amounts.

Limited Capacity (Painted Pallets) =	51,875 tons pallets/yr	103,750,000 lb pallets/yr	1,596,154 pallets/yr
Weight of each painted pallet =	65 lb/pallet		
			1,660 MMBtu/yr
Maximum amount of paint on each pallet =	5 oz paint/pallet		
	0.3125 lb paint/pallet		
Maximum amount of paint Combusted =	249.40 tons paint/yr		

Metals	Detection Level mg/kg	Detection Level fraction of metal in the paint	Potential to Emit lb/yr	Potential to Emit lb/hr	Emission Factor lb/MMBtu
Arsenic	1.8	1.80E-06	0.9	1.03E-04	1.79E-06
Barium	1.8	1.80E-06	0.9	1.03E-04	1.79E-06
Cadmium	1.8	1.80E-06	0.9	1.03E-04	1.79E-06
Chromium	1.8	1.80E-06	0.9	1.03E-04	1.79E-06
Lead	1.8	1.80E-06	0.9	1.03E-04	1.79E-06
Selenium	1.8	1.80E-06	0.9	1.03E-04	1.79E-06
Silver	1.8	1.80E-06	0.9	1.03E-04	1.79E-06
Mercury	0.33	3.31E-07	0.2	1.88E-05	3.29E-07

Methodology
Maximum amount of paint Combusted = Amount of Paint on pallet (lb paint/pallet) x Pallet Burning Capacity (pallets/yr) / 2000 lb/ton
Detection Level (fraction) = Detection Level(mg/kg) / 64.8 mg/grain / 7000 grains/lb / 2.2 lb/kg
Potential to Emit (lb/yr) = Maximum Amount of Paint Combusted (tons paint/yr) x Detection Level (fraction) x 2000 lbs/ton

Particulate Emission Limitations for Sources of Indirect Heating
326 IAC 6-2

Emission Unit	Installation Date	Heat Input Capacity *MMBtu/hr*	Q *MMBtu/hr*	Pt *lb/MMBtu*
NG Boiler P17	1996	33.70	101.10	0.328
NG Boiler P18	1996	33.70	101.10	0.328
NG Boiler P18A	1996	33.70	101.10	0.328
wood/shredded tire Boiler P17B	2006	57.30	215.70	0.270
wood/shredded tire Boiler P17C	2006	57.30	215.70	0.270

[326 IAC 6-2-4] $$Pt = \frac{1.09}{Q^{0.26}}$$

Where:
Pt = Pounds of particulate matter emitted per million Btu heat input (lb/MMBtu).
Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr).

(e) If any limitation established by this rule is inconsistent with applicable limitations contained in 326 IAC 6.5 and 326 IAC 6.8, then the limitations contained in 326 IAC 6.5 and 326 IAC 6.8 prevail.
(f) If any limitation established by this rule is inconsistent with applicable limitations contained in 326 IAC 12 concerning new source performance standards, then the limitations contained in 326 IAC 12 prevail.

(g) If any limitation established by this rule is inconsistent with a limitation contained in a facility's construction or operation permit as issued pursuant to 326 IAC 2 concerning permit review regulations, then the limitations contained in the source's current permits prevail.

(h) If any limitation established by this rule is inconsistent with a limitation required by 326 IAC 2 concerning permit review regulations, to prevent a violation of the ambient air quality standards set forth in 326 IAC 1-4, then the limitations required by 326 IAC 2 prevail.

Particulate (PM, PM_{10}, & $PM_{2.5}$) from the Receiving, Handling, and Loadout Operations for Grain, Hull, and Meal

Unit ID	Process	Emission Unit	Control Device	Control Device ID	Stack ID	Outlet Grain Loading	Maximum Air Flow Rate	Control Efficiency	PTE of PM before Control		PTE of PM_{10} before Control		PTE of $PM_{2.5}$ before Control		PTE of PM after Control		PTE of PM_{10} after Control		PTE of $PM_{2.5}$ after Control	
						gr/dscf	*scfm*	*%*	*lb/hr*	*ton/yr*	*lb/hr*	*ton/yr*	*lb/hr*	*ton/yr*	*lb/hr*	*ton/yr*	*lb/hr*	*ton/yr*	*lb/hr*	*ton/yr*
P1	Truck Receiving		Baghouse	C1		0.005	13,000	99.0%	55.71	244.03	55.71	244.03	55.71	244.03	0.56	2.44	0.56	2.44	0.56	2.44
P3	Kaolin Handling		Baghouse	C3		0.005	2,400	99.0%	10.29	45.05	10.29	45.05	10.29	45.05	0.10	0.45	0.10	0.45	0.10	0.45
P4	Soybean Cleaning		Baghouse	C4		0.005	19,000	99.0%	81.43	356.66	81.43	356.66	81.43	356.66	0.81	3.57	0.81	3.57	0.81	3.57
P5	Soybean Cracking/Dehulling	Jet Dryer 1	Cyclone	C5A	5	0.04	64,000	99.0%	2194.29	9610.97	2194.29	9610.97	2194.29	9610.97	21.94	96.11	21.94	96.11	21.94	96.11
		Jet Dryer 2	Cyclone	C5B																
		CCD Dryer 1	Cyclone	C5C																
		CCD Dryer 2																		
		cracking/dehulling roll 1																		
		CCC Cooler 1	Cyclone	C5D																
		CCC Cooler 2																		
		cracking/dehulling roll 2																		
		hull screener & aspirator	Cyclone	C5E																
		Jet Dryer 3	Cyclone	C5F																
		CCD Dryer 3	Cyclone	C5G																
		cracking/dehulling roll 3																		
		cracking/dehulling roll 4																		
		CCC Cooler 3	Cyclone	C5H																
		cracking/dehulling roll 5																		
		cracking/dehulling roll 6																		
P6	Hull Grinding		Baghouse	C6		0.005	7,000	99.0%	30.00	131.40	30.00	131.40	30.00	131.40	0.30	1.31	0.30	1.31	0.30	1.31
P7	Hull Storage		Baghouse	C7		0.005	4,000	99.0%	17.14	75.09	17.14	75.09	17.14	75.09	0.17	0.75	0.17	0.75	0.17	0.75
P7A	Hull Handling		Baghouse	C7A		0.005	4,000	99.0%	17.14	75.09	17.14	75.09	17.14	75.09	0.17	0.75	0.17	0.75	0.17	0.75
P7B																				
P8	Hull Pellet Cooler		Cyclone	C8		0.05	12,000	99.0%	514.29	2,253	514.3	2,253	514.3	2,253	5.14	22.53	5.14	22.53	5.14	22.53
P8A	Hull Pellet Storage		Baghouse	C8A		0.005	4,000	99.0%	17.14	75.09	17.14	75.09	17.14	75.09	0.17	0.75	0.17	0.75	0.17	0.75
P8B			Baghouse	C8B																
P9	Meal Handling		Baghouse	C9		0.0065	4,637	99.0%	25.83	113.16	25.83	113.16	25.83	113.16	0.26	1.13	0.26	1.13	0.26	1.13
P14	Truck Meal Loadout		Baghouse	C14		0.005	16,000	99.0%	68.57	300.34	68.57	300.34	68.57	300.34	0.69	3.00	0.69	3.00	0.69	3.00
P15	Rail/Barge Meal Loadout		Baghouse	C15		0.005	16,000	99.0%	68.57	300.34	68.57	300.34	68.57	300.34	0.69	3.00	0.69	3.00	0.69	3.00
P19	Soybean Flaking	Flakers 1-10	Baghouse	C19A	P19	0.002	26,000	99.0%	39.00	170.82	39.00	170.82	39.00	170.82	0.39	1.71	0.39	1.71	0.39	1.71
			Baghouse	C19B																
			Baghouse	C19C																
		Flakers 1-10	Baghouse	C19D	P19D	0.00325	26,000	99.0%	72.43	317.24	72.43	317.24	72.43	317.24	0.72	3.17	0.72	3.17	0.72	3.17
P20	Meal Storage		Baghouse	C20		0.005	6,000	99.0%	25.71	112.63	25.71	112.63	25.71	112.63	0.26	1.13	0.26	1.13	0.26	1.13
P24	North Truck Receiving		Baghouse	C24		0.005	10,000	99.0%	42.86	187.71	42.86	187.71	42.86	187.71	0.43	1.88	0.43	1.88	0.43	1.88
Total										14,124		14,124		14,124		**141.24**		**141.24**		**141.24**

Assumptions
All PM emissions equal PM_{10} and $PM_{2.5}$ emissions.

Methodology
Potential to Emit after Control (lb/hr) = Outlet Grain Loading (gr/dscf) x Max. Air Flow Rate (scfm) x 60 mins/hr x 1/7000 lb/gr
Potential to Emit after Control (ton/yr) = Potential to Emit after Control (lb/hr) x 8760 hr/yr / 2000 lb/ton
Potential to Emit before Control (lb/hr) = Potential to Emit after Control (lb/hr) / [1 - Control Efficiency (%)]
Potential to Emit before Control (ton/yr) = Potential to Emit before Control (lb/hr) x 8760 hr/yr / 2000 lb/ton

Particulate (PM, PM_{10}, & $PM_{2.5}$) from the Receiving, Handling, and Loadout Operations for Grain, Hull, and Meal

Unit ID	Unit Description	Maximum Throughput Rate		Annual Throughput Limit	Uncontrolled PM Emission Factor	Uncontrolled PM_{10} Emission Factor	Uncontrolled $PM_{2.5}$ Emission Factor	PTE of PM before Control		PTE of PM_{10} before Control		PTE of $PM_{2.5}$ before Control		Control Measure	Control Efficiency	PTE of PM after Control and Limit		PTE of PM_{10} after Control and Limit		PTE of $PM_{2.5}$ after Control and Limit	
		ton/hr	*ton/yr*	*ton/yr*	*lb/ton*	*lb/ton*	*lb/ton*	*lb/hr*	*ton/yr*	*lb/hr*	*ton/yr*	*lb/hr*	*ton/yr*		*%*	*lb/hr*	*ton/yr*	*lb/hr*	*ton/yr*	*lb/hr*	*ton/yr*
P2	Truck and Railcar Receiving	540	4,730,400	1,020,000	0.035	0.0078	0.00013	18.90	82.78	4.21	18.45	0.07	0.31	Enclosure/ Mineral Oil	60%	1.63	7.14	1.63	7.14	1.63	7.14
P2A	Annex Silo Storage	1,740	15,242,400	1,020,000	0.025	0.0063	0.0011	43.50	190.53	10.96	48.01	1.91	8.38	Mineral Oil	60%	1.16	5.10	0.29	1.29	0.05	0.22
P2A	Annex Silo Loading	1,740	15,242,400	1,020,000	0.061	0.034	0.0058	106.14	464.89	59.16	259.12	10.09	44.20	Mineral Oil	60%	2.84	12.44	1.58	6.94	0.27	1.18
P2B	Soybean Storage	600	5,256,000	1,020,000	0.025	0.0063	0.0011	15.00	65.70	3.78	16.56	0.66	2.89	Mineral Oil	60%	1.16	5.10	0.29	1.29	0.05	0.22
P2B	Soybean Loading	600	5,256,000	1,020,000	0.061	0.034	0.0058	36.60	160.31	20.40	89.35	3.48	15.24	Mineral Oil	60%	2.84	12.44	1.58	6.94	0.27	1.18
P21	Soybean Heater	115	1,007,400	940,240	0.001	0.001	0.001	0.12	0.50	0.12	0.50	0.12	0.50	NA	0%	0.11	0.47	0.11	0.47	0.11	0.47
P27	North House Bin Loading	360	3,153,600	108,000	0.061	0.034	0.0058	21.96	96.18	12.24	53.61	2.09	9.15	Chamber Effect	70%	0.23	0.99	0.13	0.55	0.02	0.09
Total									**803.91**		**342.14**		**55.78**				**29.78**		**16.65**		**8.77**

Notes:
Emission factors are from AP-42, Chapter 9.9.1 - Grain Elevators, Table 9.9.1-1 (03/03).
Emission factors for P21 are based on stack testing.
*Controlled PTE for P1 and P2 is calculated without consideration of the Baghouse controlling the aspirated soybean receiving legs.

Methodology
Potential to Emit before Control (lb/hr) = Maximum Throughput Rate (ton/hr) x Uncontrolled Emission Factor (lb/ton)
Potential to Emit before Control (ton/yr) = Potential to Emit before Control (lb/hr) x 8760 hr/yr / 2000 lb/ton
Potential to Emit after Control and Limit (lb/hr) = Annual Throughput Limit (ton/yr) / 8760 hr/yr x Uncontrolled Emission Factor (lb/ton) x [1 - Control Efficiency (%)]
Potential to Emit after Control and Limit (ton/yr) = Annual Throughput Limit (ton/yr) x Uncontrolled Emission Factor (lb/ton) / 2000 lb/ton x [1 - Control Efficiency (%)]

VOC and HAP from the Soybean Oil Extraction System

Unit ID	Process	Maximum Throughput Rate		Annual Throughput Limit	Control Measure	Control Efficiency	VOC Emission Factor (Unrestricted)	VOC Emissions (Unrestricted)	VOC Emission Factor (BACT)	VOC Emissions (BACT)	VOC Emissions (BACT + Production Limit)	Hexane Emission Factor (Unrestricted)	Hexane Emission Factor (BACT)	Hexane Density	HAP Emissions (Unrestricted)	HAP Emissions (BACT)	HAP Emissions (BACT + Production Limit)
		ton/hr	*ton/yr*	*ton/yr*		*%*	*gal/ton*	*ton/yr*	*lb/ton*	*ton/yr*	*ton/yr*	*gal/ton*	*gal/ton*	*lb/gal*	*ton/yr*	*ton/yr*	*ton/yr*
P13	Soybean Oil Extraction System	115.0	1,007,400	940,240	Mineral Oil Absorber	99.5%	0.89	1,331	0.084	42.31	39.49	0.89	0.225	2.97	1,331	336.60	314.16

VOC Content: 100%
Solvent Used: Hexane (This is also a HAP)

Hexane Emission Rates: 4.9 lb/ton
0.89 gal/ton

Hexane Vapor Density: 2.97 lb/gal

Notes:
Unrestricted VOC Emission factor is from AP-42, Chapter 9.11 - Vegetable Oil Processing, Section 9.11.1.3 (11/95). (All VOC is Hexane.)
Unrestricted Hexane Emission factor is from AP-42, Chapter 9.11 - Vegetable Oil Processing, Section 9.11.1.3 (11/95).
BACT Emission rates are from CP#129-7488-00035, issued on July 17, 1995, and SSM No. 129-27572-00035 (Revised BACT), issued on August 11, 2009.
The VOC/Hexane emissions estimates for the Soybean Oil Extraction System include tank emissions.

Methodology
Potential to Emit VOC (Unrestricted) = Maximum Throughput Rate (ton/hr) x Unrestricted VOC Emission Factor (gal/ton beans) x Density (lb/gal) x 8760 hr/yr / 2000 lb/ton
Potential to Emit VOC (BACT Limit) = Maximum Process Weight (ton/hr beans) x BACT VOC Emission Factor (lb/ton beans) x 8760 hr/yr / 2000 lb/ton
Potential to Emit VOC (BACT + Production Limit) = Annual Production Limit (ton/yr beans) x BACT VOC Emission Factor (lb/ton beans) / 2000 lb/ton
Potential to Emit Hexane (Unrestricted) = Maximum Throughput Rate (ton/hr) x Unrestricted Hexane Emission Factor (gal/ton beans) x Density (lb/gal) x 8760 hr/yr / 2000 lb/ton
Potential to Emit Hexane (BACT Limit) = Maximum Process Weight (ton/hr beans) x BACT Hexane Emission Factor (gal/ton beans) x Density (lb/gal) x 8760 hr/yr / 2000 lb/ton
Potential to Emit Hexane (BACT + Production Limit) = Annual Production Limit (ton/yr beans) x BACT Hexane Emission Factor (gal/ton beans) x Density (lb/gal) / 2000 lb/ton

Particulate (PM, PM_{10}, & $PM_{2.5}$) from the Meal Dryers and Cooler

Unit ID	Process	Control Device	Control Device ID	Particulate Emision Factor	Outlet Grain Loading	Maximum Air Flow Rate	Control Efficiency	PTE of PM before Control		PTE of PM_{10} before Control		PTE of $PM_{2.5}$ before Control		PTE of PM after Control		PTE of PM_{10} after Control		PTE of $PM_{2.5}$ after Control	
				lb/ton	*gr/dscf*	*scfm*	*%*	*lb/hr*	*ton/yr*	*lb/hr*	*ton/yr*	*lb/hr*	*ton/yr*	*lb/hr*	*ton/yr*	*lb/hr*	*ton/yr*	*lb/hr*	*ton/yr*
P10	DTDC Meal Dryer Section 1	Cyclone	C10	0.18	0.07	8,979	99.0%	20.70	90.67	20.70	90.67	20.70	90.67	5.39	23.60	5.39	23.60	5.39	23.60
P11	DTDC Meal Dryer Section 2	Cyclone	C11	0.18	0.0017	8,788	99.0%	20.70	90.67	20.70	90.67	20.70	90.67	0.13	0.56	0.13	0.56	0.13	0.56
P12	DTDC Meal Dryer Section 3	Cyclone	C11A	0.18	0.0017	6,751	99.0%	20.70	90.67	20.70	90.67	20.70	90.67	0.10	0.43	0.10	0.43	0.10	0.43
P12A	DTDC Meal Cooling Operation	Cyclone	C12A	0.19	0.0011	23,000	99.0%	21.85	95.70	21.85	95.70	21.85	95.70	0.22	0.95	0.22	0.95	0.22	0.95
Total									367.70		367.70		367.70		**25.54**		**25.54**		**25.54**

Assumptions
All PM emissions equal PM_{10} and $PM_{2.5}$ emissions.
Unrestricted Particulate Emission factor is from AP-42, Chapter 9.11 - Vegetable Oil Processing, Section 9.11.1.3, Table 9.11.1-1 (11/95).

Methodology
Potential to Emit before Control (lb/hr) = Particulate Emission Factor (lb/ton) x Maximum Throughput (ton/hr)
Potential to Emit before Control (ton/yr) = Potential to Emit before Control (lb/hr) x 8760 hr/yr / 2000 lb/ton
Potential to Emit after Control (lb/hr) = Outlet Grain Loadingl (gr/dscf) x Air Flow (scfm) x 60 min/hr / 7000 gr/lb
Potential to Emit after Control (ton/yr) = Potential to Emit after Control (lb/hr) x 8760 hr/yr / 2000 lb/ton

VOC and HAP from the Meal Dryers and Cooler

Unit ID	Process	Maximum Throughput Rate		Annual Throughput Limit	VOC Emission Factor (Unrestricted)	VOC Emissions (Unrestricted)	VOC Emission Factor (BACT)	VOC Emissions (BACT)	VOC Emissions (BACT + Production Limit)	Hexane Emission Factor (Unrestricted)	Hexane Density	HAP Emissions (Unrestricted)	HAP Emissions (Production Limit)
		ton/hr	*ton/yr*	*ton/yr*	*gal/ton*	*ton/yr*	*lb/ton*	*ton/yr*	*ton/yr*	*gal/ton*	*lb/gal*	*ton/yr*	*ton/yr*
P10	DTDC Meal Dryer Section 1	115.0	1,007,400	940,240	0.89	1,331	0.16	80.59	75.22	0.89	2.97	1,331	1,243
P11	DTDC Meal Dryer Section 2	115.0	1,007,400	940,240	0.89	1,331				0.89	2.97	1,331	
P12	DTDC Meal Dryer Section 3	115.0	1,007,400	940,240	0.89	1,331				0.89	2.97	1,331	
P12A	DTDC Meal Cooling Operation	115.0	1,007,400	940,240	0.89	1,331	0.16	80.59	75.22	0.89	2.97	1,331	1,243
Total						**5,326**		**161.18**	**150.44**			**5,326**	**2,485**

Notes
All the VOC are Hexane, which is also a HAP.
Dryer Section P10, P11, and P12 are operated in series.
Unrestricted VOC Emission factor is from AP-42, Chapter 9.11 - Vegetable Oil Processing, Section 9.11.1.3 (11/95). (All VOC is Hexane.)
Unrestricted Hexane Emission factor is from AP-42, Chapter 9.11 - Vegetable Oil Processing, Section 9.11.1.3 (11/95).
BACT Emission rates are from CP#129-7488-00035, issued on July 17, 1995, and SSM No. 129-27572-00035 (Revised BACT), issued on August 11, 2009.

Methodology
Potential to Emit VOC (Unrestricted) = Maximum Throughput Rate (ton/hr) x Unrestricted VOC Emission Factor (gal/ton beans) x Density (lb/gal) x 8760 hr/yr / 2000 lb/ton
Potential to Emit VOC (BACT Limit) = Maximum Process Weight (ton/hr beans) x BACT VOC Emission Factor (lb/ton beans) x 8760 hr/yr / 2000 lb/ton
Potential to Emit VOC (BACT + Production Limit) = Annual Production Limit (ton/yr beans) x BACT VOC Emission Factor (lb/ton beans) / 2000 lb/ton
Potential to Emit Hexane (Unrestricted) = Maximum Throughput Rate (ton/hr) x Unrestricted Hexane Emission Factor (gal/ton beans) x Density (lb/gal) x 8760 hr/yr / 2000 lb/ton
Potential to Emit Hexane (Production Limit) = Annual Production Limit (ton/yr beans) x Hexane Emission Factor (gal/ton beans) x Density (lb/gal) / 2000 lb/ton

Particulate Emission Limitations for Manufacturing Processes

326 IAC 6-3-2

		Process Weight, P		P<=60,000 lb/hr	P>60,000 lb/hr
		each unit	each unit	$E = 4.10\ P^{0.67}$	$E = 55\ P^{0.11} - 40$
PM Control Device	**Process**	P (lb/hr)	P (ton/hr)	E (lb/hr)	E (lb/hr)
Baghouse C3	Kaolin Handling P3	834	0.417	2.3	-
Cyclone C5A	Soybean Cracking/Dehulling P5	230,000	115.0	-	52.7
Baghouse C6	Hull Grinding P6	16,100	8.1	16.6	-
Baghouse C7	Hull Storage P7	30,000	15.0	25.2	-
Baghouse C7A	Hull Handling P7A	30,000	15.0	25.2	-
Cyclone C8	Hull Pellet Cooler P8	30,000	15.0	25.2	-
Baghouse C8A	Hull Pellet Storage P8A	30,000	15.0	25.2	-
Baghouse C9	Meal Handling P9	168,600	84.3	-	49.6
Baghouse C14	Truck Meal Loadout P14	766,600	383.3	-	65.8
Baghouse C15	Rail/Barge Meal Loadout P15	766,600	383.3	-	65.8
Baghouse C19A	Soybean Flaking P19	209,800	104.9	-	51.8
Baghouse C20	Meal Storage P20	600,000	300.0	-	63.0
NA	Soybean Heater P21	230,000	115.0	-	52.7
Cyclone C10	DTDC Meal Dryer Section 1 P10	230,000	115.0	-	52.7
Cyclone C11	DTDC Meal Dryer Section 2 P11	230,000	115.0	-	52.7
Cyclone C11A	DTDC Meal Dryer Section 3 P12	230,000	115.0	-	52.7
Cyclone C12A	DTDC Meal Cooling Operation P12A	230,000	115.0	-	52.7

(c) This rule shall not apply if a particulate matter limitation established in:
(1) 326 IAC 2-2-3, concerning prevention of significant deterioration (PSD) best available control technology (BACT) determinations contained in a permit;
(2) 326 IAC 2-3-3, concerning lowest achievable emission rate (LAER) determinations contained in a permit;
(3) 326 IAC 6.5 and 326 IAC 6.8, concerning particulate matter emissions;
(4) 326 IAC 11, concerning existing emission limitations for specific operations;
(5) 326 IAC 12, concerning new source performance standards; or
(6) 326 IAC 20, concerning national emission standards for hazardous air pollutants;

The north truck receiving area (P24), the north house bin loading area (P27), the truck soybean receiving area (P1), the truck and railcar soybean and hull receiving area (P2), the annex silo loading operation (P2A), the soybean storage system (P2B), and the soybean cleaning operation (P4) at this source are the requirements of 40 CFR 60, Subpart DD (NSPS for Grain Elevators). Therefore, these operations are exempt from the requirements of 326 IAC 6-3, pursuant to 326 IAC 6-3-1(c)(5).

Diesel Fired Fire Pumps (Emergency)

Emission Unit	Rating		Heat Input Capacity		Installation Date	Operating Hours	
emergency generator	305	hp	2.14	MMBtu/hr	2012	500	hr/yr
emergency generator	305	hp	2.14	MMBtu/hr	1997	500	hr/yr
Maximum Capacity:	610	hp	4.27	MMBtu/hr			

	Potential To Emit - Regulated Pollutants							PTE - GHGs			
								1	*21*	*310*	***GWP***
	CO	**NO_X**	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**VOC**	**CO_2**	**CH_4**	**N_2O**	**CO_2e**
Emission Factor (lb/MMBtu)	0.95	4.41	0.31	0.31	0.31	0.29	0.36	164	6.61E-03	1.32E-03	
Uncontrolled Potential To Emit (lb/hr)	4.06	18.83	1.32	1.32	1.32	1.24	1.54	700.28	2.82E-02	5.65E-03	702.62
Uncontrolled Potential To Emit (ton/yr)	1.01	4.71	0.33	0.33	0.33	0.31	0.38	175.07	7.06E-03	1.41E-03	175.66

	Potential To Emit - Hazardous Air Pollutants								
	Acetal-dehyde	**Acrolein**	**Benzene**	**1,3 Butadiene**	**Formal-dehyde**	**PAH**	**Toluene**	**Xylene**	**Total HAPs**
Emission Factor (lb/MMBtu)	*7.67E-04*	*9.25E-05*	*9.33E-04*	*3.91E-05*	*1.18E-03*	*1.68E-04*	*4.09E-04*	*2.85E-04*	
Uncontrolled Potential To Emit (lb/hr)	3.28E-03	3.95E-04	3.98E-03	1.67E-04	5.04E-03	7.17E-04	1.75E-03	1.22E-03	1.65E-02
Uncontrolled Potential To Emit (ton/yr)	8.19E-04	9.87E-05	9.96E-04	4.17E-05	1.26E-03	1.79E-04	4.37E-04	3.04E-04	4.14E-03

Methodology

7,000 Btu = 1 hp-hr

MMBtu = 1,000,000 Btu

Emission factors are from AP-42, Chapter 3.3, Table 3.3-1, SCC #2-02-001-02 and 2-03-001-01 (AP-42 Supplement B, 10/96).

CH_4 and N_2O emission factors are from 40 CFR 98, Table C-2.

Assume PM = PM_{10} = $PM_{2.5}$

Assume TOC (total organic compounds) emissions are equal to VOC emissions.

Potential to Emit (lb/hr) = Rating (hp) x Emission Factor (lb/hp-hr)

Potential to Emit (lb/hr) = Heat Input Capacity (MMBtu/hr) x Emission Factor (lbs/MMBtu)

Potential to Emit (tons/yr) = Potential to Emit (lb/hr) x 500 hr/yr /2000 lb/ton

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

CO_2e (ton/yr) = CO_2 Potential Emission (ton/yr) x CO_2 GWP + CH4 Potential Emission (ton/yr) x CH_4 GWP + N_2O Potential Emission (ton/yr) x N_2O GWP

Natural Gas Fired Emergency Generator

2 stroke lean burn engine

Emission Unit	Rating		Heat Input Capacity		Installation Date
emergency generator	343	kW	1.17	MMBtu/hr	1997
Maximum Capacity:	343	kW	1.17	MMBtu/hr	

Operating Hours
500 hr/yr

	Potential To Emit - Regulated Pollutants							Potential To Emit - GHGs			
								1	*21*	*310*	***GWP***
	CO	**NO_X**	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**VOC**	**CO_2**	**CH_4**	**N_2O**	**CO_2e**
Emission Factor (lb/MMBtu)	*0.386*	*3.17*	*3.84E-02*	*0.0483*	*0.0483*	*5.88E-04*	*0.12*	*110*	*1.45*	*2.2E-04*	
Uncontrolled Potential To Emit (lb/hr)	0.45	3.71	4.49E-02	0.0565	0.0565	6.88E-04	0.140	128.70	1.70	2.58E-04	164.41
Uncontrolled Potential To Emit (ton/yr)	0.11	0.93	1.12E-02	0.0141	0.0141	1.72E-04	0.035	32.18	0.42	6.45E-05	41.10

PM emission factor is filterable PM only. PM_{10} emission factor is filterable and condensable PM_{10} combined. $PM_{2.5}$ emission factor is filterable and condensable $PM_{2.5}$ combined.

	Potential To Emit - Hazardous Air Pollutants										
	Acrolein	**Benzene**	**Ethyl-benzene**	**Formal-dehyde**	**Hexane**	**Methanol**	**Naptha-lene**	**Styrene**	**Toluene**	**Xylene**	**Total HAPs**
Emission Factor (lb/MMBtu)	*7.8E-03*	*1.9E-03*	*1.1E-04*	*5.5E-02*	*4.45E-04*	*2.5E-03*	*9.6E-05*	*5.5E-05*	*9.6E-04*	*2.7E-04*	
Uncontrolled Potential To Emit (lb/hr)	9.1E-03	2.3E-03	1.3E-04	6.5E-02	5.21E-04	2.9E-03	1.1E-04	6.4E-05	1.1E-03	3.1E-04	0.081
Uncontrolled Potential To Emit (ton/yr)	2.3E-03	5.7E-04	3.2E-05	1.6E-02	1.30E-04	7.3E-04	2.8E-05	1.6E-05	2.8E-04	7.8E-05	0.018

Methodology

MMBtu = 1,000,000 Btu

Emission factors are from AP-42, Chapter 3.2, Table 3.2-1: Uncontrolled Emission Factors for 2-Stroke Lean-Burn Engines (AP-42, 08/00).

N_2O emission factor is from 40 CFR 98, Table C-2.

Potential to Emit (lb/hr) = Heat Input Capacity (MMBtu/hr) x Emission Factor (lbs/MMBtu)

Potential to Emit (tons/yr) = Potential to Emit (lb/hr) x 500 hr/yr /2000 lb/ton

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

CO_2e (ton/yr) = CO_2 Potential Emission (ton/yr) x CO_2 GWP + CH4 Potential Emission (ton/yr) x CH_4 GWP + N_2O Potential Emission (ton/yr) x N_2O GWP

Fugitive Emissions
Unpaved Roads

According to AP42, Chapter 13.2.2 - Unpaved Roads (11/06), the particulate emission factors for unpaved roads can be estimated from the following equation:

$$E = k \times (s/12)^a \times (w/3)^b$$

where:

E = emission factor (lb/vehicle mile traveled)			
s = surface material silt content (%) =	6.4 % (AP-42, Table 13.2.2-1)		
w = mean vehicle weight (tons) =	29.2 tons (see the calculations below)		
k = empirical constant =	4.9 PM	1.5 PM_{10}	0.15 $PM_{2.5}$
a = empirical constant =	0.7 PM	0.9 PM_{10}	0.9 $PM_{2.5}$
b = empirical constant =	0.45		

Vehicle Type	Average Vehicle Weight *tons*	Total Trip Number* *trips/yr*	Round Trip Distance* *miles/trip*	Vehicle Mile Traveled (VMT) *miles/yr*	Traffic Component* *%*	Component Vehicle Weight *tons*	PM Emission Factor *lb/mile*	PM_{10} Emission Factor *lb/mile*	$PM_{2.5}$ Emission Factor *lb/mile*	PM Emissions *ton/yr*	PM_{10} Emissions *ton/yr*	$PM_{2.5}$ Emissions *ton/yr*
Wood Truck	28.0	2,313	0.06	139	90.1%	25.2	8.78	2.37	0.24	0.610	0.165	0.016
Tire Truck	40.0	254	0.06	15	9.89%	4.0	8.78	2.37	0.24	0.067	0.018	0.002
Total				**154**	**100%**	**29.2**				**0.677**	**0.183**	**0.018**

* This information is provided by the source.

Methodology

Component Vehicle Weight = Ave. Vehicle Weight (tons) x Traffic Component (%) (Note that the summation of the component vehicle weight equals the Mean Vehicle Weight.)
VMT (miles/yr) = Round Trip Distance (miles/trip) x Total Trip Numbers (trips/yr)
Potential to Emit (tons/yr) = VMT (miles/yr) x Emission Factors (lb/mile) / 2000 lb/ton

Fugitive Emissions
Paved Roads

According to AP42, Chapter 13.2.1 - Paved Roads (11/06), the particulate emission factors for paved roads can be estimated from the following equation:

$$EF = [k\ (sL)^{0.91}(W)^{1.02]}(1-(P/4N))$$

where: EF = Emission Factor lbs/VMT
k = Particle Size Multiplier for Paved Road Equation
0.011 PM 0.0022 PM_{10} 0.00054 $PM_{2.5}$

sL = Road Surface Silt Loading (grams per square meter (g/m2))	2.9	(g/m^2) (AP-42, Table 13.2.1-3)
W = average weight (tons) of vehicles traveling the road.	37.0	
P = number of days with at least 0.01 in of precipitation during averaging period	120	
N = number of days in the averaging period (e.g. 365 for annual)	365	

Vehicle Type	**Average Vehicle Weight** *tons*	**Total Trip Number*** *trips/yr*	**Round Trip Distance*** *miles/trip*	**Vehicle Mile Traveled (VMT)** *miles/yr*	**Traffic Component*** *%*	**Component Vehicle Weight** *tons*	**PM Emission Factor (non-winter)** *lb/mile*	**PM_{10} Emission Factor (non-winter)** *lb/mile*	**$PM_{2.5}$ Emission Factor (non-winter)** *lb/mile*	**PM Emissions** *ton/yr*	**PM_{10} Emissions** *ton/yr*	**$PM_{2.5}$ Emissions** *ton/yr*
Grain Receiving	40.0	35,000	0.28	9,940	74.5%	29.8	1.06	0.21	0.05	5.254	1.051	0.258
Wood Truck	28.0	2,313	0.74	1,712	24.9%	7.0	1.06	0.21	0.05	0.905	0.181	0.044
Tire Truck	40.0	23	0.74	17	0.2%	0.1	1.06	0.21	0.05	0.009	0.002	0.000
Ash Truck	28.0	46	0.50	23	0.33%	0.1	1.06	0.21	0.05	0.012	0.002	0.001
Total				**11,691**	**100%**	**37.0**				**6.180**	**1.236**	**0.303**

* This information is provided by the source.

Methodology
Component Vehicle Weight = Ave. Vehicle Weight (tons) x Traffic Component (%)
(Note that the summation of the component vehicle weight equals the Mean Vehicle Weight.)
VMT (miles/yr) = Round Trip Distance (miles/trip) x Total Trip Numbers (trips/yr)
Potential to Emit (tons/yr) = VMT (miles/yr) x Emission Factors (lb/mile) / 2000 lb/ton

Fugitive Emissions
Grain Storage Piles

Ef =	1.7 x (s/1.5) x (365-p)/235 x (f/15)	
=	1.89	lb/acre/day
where s =	1.6	% silt content of material
p =	120	days of rain greater than or equal to 0.01 inches
f =	15	% of wind greater than or equal to 12 mph
Ep (storage) =	Ef x sc x (40 cuft/ton) / (2000 lb/ton) / (43560 sqft/acre) / (25 ft) x (365 day/yr)	
=	0.53	tons/yr
where sc =	42	,000 tons storage capacity

This calculation is from AP-42, Chapter 11.2.3, Fourth edition (5/83).
The calculations were not included in subsequent editions of AP-42.

Degreasing Operations

VOC/HAP Emissions:

Solvents	Density (lb/gal)	Maximum Usage (gals/yr)	VOC Info: Weight % VOC	VOC Info: VOC Emissions (tons/yr)
mineral spirits (petroleum naptha)	8.2	145	100%	0.59

Notes:
Maximum Usage is based upon the maximum allowable solvent usage for degreasing operations that are considered "insignificant" under 326 IAC 2-7-1(21)(K)(vi)(CC).
Acetone is considered an exempt VOC product.

Methodology
VOC/HAP Emissions (tons/yr) = Density (lbs/gal) x Maximum Usage (gals/yr) x Weight % VOC or HAP x 1 ton/2,000 lbs

Hexane Storage Tanks

Number of storage tanks:	1		
volume:	8,000	gal	
Tanks VOC/HAP Emissions:	1.25	ton/yr	

Number of storage tanks:	1		
volume:	28,000	gal	
Tanks VOC/HAP Emissions:	4.38	ton/yr	

Number of storage tanks:	2		
volume:	14,000	gal	
Tanks VOC/HAP Emissions:	2.19	ton/yr	each
(TANKS)	4.38	ton/yr	total

Total VOC/HAP Emissions:	10.00	ton/yr

However…
The Hexane Emissions from the storage tanks are routed to the stack for the Soybean Oil Extraction System (P13), and the emission factors for this system account for the emissions from these tanks.

Natural Gas Fired Heaters

Boilers <10 MMBtu/hr

Emission Unit	Heat Input Capacity		Potential Throughput	Installation Date
Welfare Building Heater 1	0.22	MMBtu/hr	1.89 MMCF/yr	
Welfare Building Heater 2	0.22	MMBtu/hr	1.89 MMCF/yr	
Maximum Capacity:	0.44	MMBtu/hr	3.78 MMCF/yr	

	Potential To Emit - Regulated Pollutants							Potential To Emit - Greenhouse Gases			
								1	*21*	*310*	***GWP***
	CO	**NO_X**	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**VOC**	**CO_2**	**CH_4**	**N_2O**	**CO_2e**
Emission Factor (lb/MMCF)	*84*	*100*	*1.9*	*7.6*	*7.6*	*0.6*	*5.5*	*120,000*	*2.3*	*2.2*	
Uncontrolled Potential To Emit (lb/hr)	0.036	0.043	8.2E-04	3.3E-03	3.3E-03	2.6E-04	2.4E-03	51.76	9.9E-04	9.5E-04	52.08
Uncontrolled Potential To Emit (ton/yr)	0.16	0.19	3.6E-03	1.4E-02	1.4E-02	1.1E-03	1.0E-02	226.73	4.3E-03	4.2E-03	228.11

PM emission factor is filterable PM only. PM_{10} emission factor is filterable and condensable PM_{10} combined. $PM_{2.5}$ emission factor is filterable and condensable $PM_{2.5}$ combined.

Emission Factors for NO_X: Uncontrolled = 100, Low NO_X Burner = 50, Low NO_X Burners/Flue gas recirculation = 32

	Potential To Emit - Hazardous Air Pollutants										
	HAPs - Organics					HAPs - Metals					
	Benzene	**Dichloro-benzene**	**Formal-dehyde**	**Hexane**	**Toluene**	**Cadmium**	**Chromium**	**Lead**	**Manganese**	**Nickel**	**Total HAPs**
Emission Factor (lb/MMCF)	*2.1E-03*	*1.2E-03*	*7.5E-02*	*1.8*	*3.4E-03*	*1.1E-03*	*1.4E-03*	*5.0E-04*	*3.8E-04*	*2.1E-03*	
Uncontrolled Potential To Emit (lb/hr)	9.1E-07	5.2E-07	3.2E-05	7.8E-04	1.5E-06	4.7E-07	6.0E-07	2.2E-07	1.6E-07	9.1E-07	8.1E-04
Uncontrolled Potential To Emit (ton/yr)	4.0E-06	2.3E-06	1.4E-04	3.4E-03	6.4E-06	2.1E-06	2.6E-06	9.4E-07	7.2E-07	4.0E-06	3.6E-03

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

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/1,020 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
Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
The N_2O Emission Factor for uncontrolled is 2.2. The N_2O Emission Factor for low Nox burner is 0.64.
CO_2e (ton/yr) = CO_2 Potential Emission (ton/yr) x CO_2 GWP + CH4 Potential Emission (ton/yr) x CH_4 GWP + N_2O Potential Emission (ton/yr) x N_2O GWP
Potential to Emit (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lbs/MMCF) x 1 ton/2000 lbs

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	CGBhex
City:	Mt. Vernon
State:	Indiana
Company:	Consolidated Grain and Barge Co.
Type of Tank:	Vertical Fixed Roof Tank
Description:	hexane storage tank

Tank Dimensions

Shell Height (ft):		16.00
Diameter (ft):		12.50
Liquid Height (ft) :		15.00
Avg. Liquid Height (ft):		14.00
Volume (gallons):		13,770.01
Turnovers:		365.00
Net Throughput(gal/yr):		5,026,054.89
Is Tank Heated (y/n):	N	

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

Roof Characteristics

Type:	Dome	
Height (ft)		0.00
Radius (ft) (Dome Roof)		0.00

Breather Vent Settings

Vacuum Settings (psig):	-0.03
Pressure Settings (psig)	0.03

Meterological Data used in Emissions Calculations: Indianapolis, Indiana (Avg Atmospheric Pressure = 14.33 psia)

TANKS 4.0.9d
Emissions Report - Detail Format
Liquid Contents of Storage Tank

CGBhex - Vertical Fixed Roof Tank
Mt. Vernon, Indiana

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Hexane (-n)	All	54.01	48.91	59.11	52.28	1.6338	1.4231	1.8696	86.1700			86.17	Option 2: A=6.876, B=1171.17, C=224.41

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

CGBhex - Vertical Fixed Roof Tank
Mt. Vernon, Indiana

Annual Emission Calcaulations

Standing Losses (lb):	183.8661
Vapor Space Volume (cu ft):	350.6534
Vapor Density (lb/cu ft):	0.0255
Vapor Space Expansion Factor:	0.0702
Vented Vapor Saturation Factor:	0.8016
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	350.6534
Tank Diameter (ft):	12.5000
Vapor Space Outage (ft):	2.8574
Tank Shell Height (ft):	16.0000
Average Liquid Height (ft):	14.0000
Roof Outage (ft):	0.8574
Roof Outage (Dome Roof)	
Roof Outage (ft):	0.8574
Dome Radius (ft):	12.5000
Shell Radius (ft):	6.2500
Vapor Density	
Vapor Density (lb/cu ft):	0.0255
Vapor Molecular Weight (lb/lb-mole):	86.1700
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	1.6338
Daily Avg. Liquid Surface Temp. (deg. R):	513.6827
Daily Average Ambient Temp. (deg. F):	52.2583
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731
Liquid Bulk Temperature (deg. R):	511.9483
Tank Paint Solar Absorptance (Shell):	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	1,297.9516
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	0.0702
Daily Vapor Temperature Range (deg. R):	20.3982
Daily Vapor Pressure Range (psia):	0.4465
Breather Vent Press. Setting Range(psia):	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	1.6338
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	1.4231
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	1.8696
Daily Avg. Liquid Surface Temp. (deg R):	513.6827
Daily Min. Liquid Surface Temp. (deg R):	508.5831
Daily Max. Liquid Surface Temp. (deg R):	518.7822
Daily Ambient Temp. Range (deg. R):	19.7500
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor:	0.8016
Vapor Pressure at Daily Average Liquid: Surface Temperature (psia):	1.6338
Vapor Space Outage (ft):	2.8574

Working Losses (lb):	4,192.6960
Vapor Molecular Weight (lb/lb-mole):	86.1700
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	1.6338
Annual Net Throughput (gal/yr.):	5,026,054.8892
Annual Turnovers:	365.0000
Turnover Factor:	0.2489
Maximum Liquid Volume (gal):	13,770.0134
Maximum Liquid Height (ft):	15.0000
Tank Diameter (ft):	12.5000
Working Loss Product Factor:	1.0000
Total Losses (lb):	4,376.5621

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: Annual

CGBhex - Vertical Fixed Roof Tank
Mt. Vernon, Indiana

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Hexane (-n)	4,192.70	183.87	4,376.56

= 2.18828 tons

What if you are not satisfied with this decision and you want to file an appeal?

Who may file an appeal?
The decision described in the accompanying Notice of Decision may be administratively appealed. Filing an appeal is formally known as filing a "Petition for Administrative Review" to request an "administrative hearing."

If you object to this decision issued by the Indiana Department of Environmental Management (IDEM) and are: 1) the person to whom the decision was directed, 2) a party specified by law as being eligible to appeal, or 3) aggrieved or adversely affected by the decision, you are entitled to file an appeal. (An aggrieved or adversely affected person is one who would be considered by the court to be negatively impacted by the decision. If you file an appeal because you feel that you are aggrieved, it will be up to you to demonstrate in your appeal how you are directly impacted in a negative way by the decision).

The Indiana Office of Environmental Adjudication (OEA) was established by state law – see Indiana Code (IC) 4-21.5-7 – and is a separate state agency independent of IDEM. The jurisdiction of the OEA is limited to the review of environmental pollution concerns or any alleged technical or legal deficiencies associated with the IDEM decision making process. Once your request has been received by OEA, your appeal may be considered by an Environmental Law Judge.

What is required of persons filing an appeal?
Filing an appeal is a legal proceeding, so it is suggested that you consult with an attorney. Your request for an appeal must include your name and address and identify your interest in the decision (Or, if you are representing someone else, his or her name and address and their interest in the decision). In addition, please include a photocopy of the accompanying Notice of Decision or list the permit number and name of the applicant, or responsible party, in your letter.

Before a hearing is granted, you must identify the reason for the appeal request and the issues proposed for consideration at the hearing. You also must identify the permit terms and conditions that, in your judgment, would appropriately satisfy the requirements of law with respect to the IDEM decision being appealed. That is, you must suggest an alternative to the language in the permit (or other order, or decision) being appealed, and your suggested changes must be consistent with all applicable laws (See Indiana Code 13-15-6-2) and rules (See Title 315 of the Indiana Administrative Code, or 315 IAC).

The effective date of this agency action is stated on the accompanying Notice of Decision (or other IDEM decision notice). If you file a "Petition for Administrative Review" (appeal), you may wish to specifically request that the action be "stayed" (temporarily halted) because most appeals do not allow for an automatic "stay." If, after an evidentiary hearing, a "stay" is granted, the IDEM-approved action may be halted altogether, or only allowed to continue in part, until a final decision has been made regarding the appeal. However, if the action is not "stayed" the IDEM-approved activity will be allowed to continue during the appeal process.

(See reverse side)

Where can you file an appeal?
If you wish to file an appeal, you must do so in writing. There are no standard forms to fill out and submit, so you must state your case in a letter (called a petition for administrative review) to the Indiana Office of Environmental Adjudication (OEA). Do not send the original copy of your appeal request to IDEM. Instead, send or deliver your letter to:

The Indiana Office of Environmental Adjudication
100 North Senate Ave.
Indiana Government Center North
Room N501E
Indianapolis, IN 46204

If you file an appeal, also please send a copy of your appeal letter to the IDEM contact person identified in the Notice of Decision, and to the applicant (person receiving an IDEM permit, or other approval).

Your appeal (petition for administrative review) must be received by the Office of Environmental Adjudication in a timely manner. Different types of permit approvals have different deadlines for filing an appeal. The accompanying Notice of Decision (NOD) explains how to determine the due date for filing an appeal for this particular permit decision. To ensure that you meet this filing requirement, your appeal request must be:

1) Delivered in person to the OEA by the close-of-business on the due date. (If the due date falls on a day when the Office of Environmental Adjudication (OEA) is closed for the weekend or for a state holiday, then your petition will be accepted on the next business day on which OEA is open.); or
2) Given to a private carrier who will deliver it to the OEA on your behalf, (and from whom you must obtain a receipt dated on or before the due date); or
3) For those appeal requests sent by U.S. Mail, your letter must be postmarked by no later than midnight of the due date; or
4) Faxed to the OEA at 317/233-9372 before the close-of-business of the due date, provided that the original signed "Petition for Administrative Review" is also sent, or delivered, to the OEA in a timely manner.

What are the costs associated with filing an appeal?
The OEA does not charge a fee for filing documents for an administrative review or for the use of its hearing facilities. However, OEA does charge a fifteen cent ($.15) per page fee for copies of any documents you may request. Another cost that could be associated with your appeal would be for attorney's fees. Although you have the option to act as your own attorney, the administrative review and associated hearing are complex legal proceedings; therefore, you should consider whether your interests would be better represented by an experienced attorney.

What can you expect from the Office of Environmental Adjudication (OEA) after you file for an appeal?
The OEA will provide you with notice of any prehearing conferences, preliminary hearings, hearings, "stays," or orders disposing of the review of this decision. In addition, you may contact the OEA by phone at 317/232-8591 with any scheduling questions. However, technical questions should be directed to IDEM at the number indicated on the Notice of Decision.

Do not expect to discuss details of your case with the OEA other than in a formal setting such as a prehearing conference, a formal hearing, or a settlement conference. The OEA is not allowed to discuss a case without all sides being present. All parties to the proceeding are expected to appear at the initial prehearing conference.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

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

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Doug Van Meter
Consolidated Grain & Barge, Co.
P.O. Box 289
Mt. Vernon, IN 47620-0289

DATE: January 25, 2013

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

SUBJECT: Final Decision
Title V
129-31079-00035

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
David Jordan (ERM)
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07

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

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

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

January 25, 2013

TO: Alexandrian Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: Consolidated Grain & Barge, Co
Permit Number: 129-31079-00035

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 11/30/07

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

TO: Interested Parties / Applicant

DATE: January 25, 2013

RE: Consolidated Grain & Barge, Co. / 129-31079-00035

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

In order to conserve paper and reduce postage costs, IDEM's Office of Air Quality is now sending many permit decisions on CDs in Adobe PDF format. The enclosed CD contains information regarding the company named above.

This permit is also available on the IDEM website at:
http://www.in.gov/ai/appfiles/idem-caats/

If you would like to request a paper copy of the permit document, please contact IDEM's central file room at:

Indiana Government Center North, Room 1201
100 North Senate Avenue, MC 50-07
Indianapolis, IN 46204
Phone: 1-800-451-6027 (ext. 4-0965)
Fax (317) 232-8659

Please Note: *If you feel you have received this information in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV.*

Enclosures
CD Memo.dot 11/14/08

Mail Code 61-53

IDEM Staff	MIDENNEY 1/25/2013 Consolidated Grain and Barge Co. 129-31079-00035 (final)			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Doug Van Meter Consolidated Grain and Barge Co. PO Box 289 Mt Vernon IN 47620-0289 (Source CAATS) via confirm delivery									
2		Mr. Wendell Hibdon Plumbers & Steam Fitters Union, Local 136 2300 St. Joe Industrial Park Dr Evansville IN 47720 *(Affected Party)*									
3		Posey County Commissioners County Courthouse, 126 E. 3rd Street Mount Vernon IN 47620 *(Local Official)*									
4		Posey County Health Department 126 E. 3rd St, Coliseum Bldg Mount Vernon IN 47620-1811 *(Health Department)*									
5		Mount Vernon City Council and Mayors Office 520 Main Street Mount Vernon IN 47620 *(Local Official)*									
6		Dr. Jeff Seyler Univ. of So Ind., 8600 Univ. Blvd. Evansville IN 47712 *(Affected Party)*									
7		Mr. Don Mottley Save Our Rivers 6222 Yankeetown Hwy Boonville IN 47601 *(Affected Party)*									
8		Alexandrian Public Library 115 West 5th Mt. Vernon IN 47620 *(Library)*									
9		David Jordan Environmental Resources Management (ERM) 11350 North Meridian, Suite 320 Carmel IN 46032 *(Consultant)*									
10		Mr. Mark Wilson Evansville Courier & Press P.O. Box 268 Evansville IN 47702-0268 *(Affected Party)*									
11		Mrs. Connie Parkinson 510 Western Hills Dr. Mt. Vernon IN 47620 *(Affected Party)*									
12		Jean Webb 7859 Coventry Court Apt C Evansville IN 47715 *(Affected Party)*									
13		Ms. Sandy Banks 5811 Greensboro Dr. Newburgh IN 47630 (Affected Party)									
14		Mr. Matt Falkenstein 624 S. Benninghof Ave. Evansville IN 47714 *(Affected Party)*									
15		Mr. Ivan Finney P.O. Box 363 Mt. Vernon IN 47620 *(Affected Party)*									

Total number of pieces Listed by Sender 14	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

FACSIMILIE OF PS Form 3877

Mail Code 61-53

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1		Kevin Neal 1445 Pearce Rd. Equality IL 62934 (Affected Party)									
2		Mrs. Brenda Vincent Rt 2 Box 221E Haubstadt IN 47639 *(Affected Party)*									
3		Mrs. Rena Garibay 600 Acorn Lane E New Harmony IN 47631 *(Affected Party)*									
4		Bob & Susan Murray 4101 Bluff Rd. Mt. Vernon IN 47620 *(Affected Party)*									
5		Mr. Bill Simmons, Jr. 12012 Timberfirld Court Sellersberg IN 47172 *(Affected Party)*									
6		Mr. Loren Evans 4424 Bluff Rd. Mt. Vernon IN 47620 *(Affected Party)*									
7		Mr. Alan Blackburn 4481 Bluff Rd. Mt. Vernon IN 47620 *(Affected Party)*									
8		L.B. Howard 5608 West Haven Dr. Evansville IN 47720 *(Affected Party)*									
9		Mr. Bruce McDivitt 1513 Green Meadow Rd. Evansville IN 47715 *(Affected Party)*									
10		Mr. Michael Verwers 49 Faughn Lane Metropolis IL 62960 *(Affected Party)*									
11		Mr. Wilson Mattingly 2225 Farmersville Rd. Mt. Vernon IN 47620 *(Affected Party)*									
12		Mr. Dan Banks 3753 Buchanon road Mt. Vernon IN 47620 *(Affected Party)*									
13		Mr. Steve Noible 5201 Oak Ln Wadesville IN 47638 (Affected Party)									
14		Mr. Keith Boyer 137 W. SR 168 Ft. Branch IN 47648 *(Affected Party)*									
15		Mr. Michael Gough 1429 Holland Bros Rd. Woodburn KY 42170 *(Affected Party)*									

Total number of pieces Listed by Sender 15	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

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1		Michael O'Risky 4871 Scenic Lake Dr. Mt. Vernon IN 47620 (Affected Party)									
2		Kim Wilson 6275 Overpass Rd. Mt. Vernon IN 47620 *(Affected Party)*									
3		Mr. Nathan Ferguson 1509 S. Worth Indianapolis IN 46241 *(Affected Party)*									
4		Ms. Sally Denning P.O. Box 533 Mt. Vernon IN 47620 *(Affected Party)*									
5		Ms. Sheri Banks 70 Hwy 62 W Mt. Vernon IN 47620 *(Affected Party)*									
6		Mr. Neal Snelling 176 Pembrook Dr Gilbertsville KY 42044 *(Affected Party)*									
7		Ms. Christina Harp 304 Coronado Drive Mt. Vernon IN 47620 *(Affected Party)*									
8		Mr. Todd Dixon 15200 Kingsmont Dr. Evansville IN 47725 *(Affected Party)*									
9		Ms. Jennifer Keppler 3700 Aspen Drive Evansville IN 47711 *(Affected Party)*									
10		Mr. Jason Blondin 731 Blue Ridge Road Evansville IN 47714 *(Affected Party)*									
11		Robert Hess c/o Mellon Corporation 830 Post Road East, Suite 105 Westport CT 06880 *(Affected Party)*									
12		Juanita Burton 7911 W. Franklin Road Evansville IN 47712 *(Affected Party)*									
13		Mr. John Blair 800 Adams Ave Evansville IN 47713 (Affected Party)									
14		David Boggs 216 Western Hills Dr Mt Vernon IN 47620 *(Affected Party)*									
15											

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