



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: April 10, 2007
RE: University of Notre Dame/141-24306-00013
FROM: Nisha Sizemore
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 13-17-3-4 and 326 IAC 2, this approval 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 13-15-7-3 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 Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER-MOD.dot 03/23/06



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204-2251
(317) 232-8603
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Mr. Tom Stark
100 Facilities Building
Notre Dame, IN 46556-5663

April 10, 2007

Re: 141-24306-00013
First Minor Source Modification to
Part 70 Permit No.: T141-7412-00013

Dear Mr. Stark:

University of Notre Dame du Lac was issued a Part 70 permit on June 30, 2004, for the operation of a campus power plant and a dry cleaning operation. An application requesting changes to this permit was received by the Office of Air Quality (OAQ) on February 9, 2007. Pursuant to the provisions of 326 IAC 2-7-10.5, a minor source modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of the addition of a baghouse, lime injection and activated carbon system to the two (2) coal or natural gas fired boilers constructed in 1952, identified as B-2 and B-3 and the one (1) coal, No.2 fuel oil, or natural gas fired boiler constructed in 1966, identified as B-4, to comply with the applicability requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, (40 CFR 63, Subpart DDDDD). The modification includes the addition of:

- i. One (1) lime sorbent storage silo (Silo 1) controlled by one (1) bin vent filter (BVF-1).
- ii. One (1) powdered activated carbon (PAC) sorbent storage silo (Silo 2) controlled by one (1) bin vent filter (BVF-2).
- iii. One (1) fly and bottom ash storage silo (Ash Silo) controlled by one (1) bin vent filter (Ash Silo Bin Vent Filter).

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13 17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The source may begin construction when the minor source modification has been issued. Operating conditions shall be incorporated into the Part 70 operating permit as a significant permit modification in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12. Operation is not approved until the significant permit modification has been issued.

All other conditions of the permit shall remain unchanged and in effect.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact James Farrell, OAQ, 100 North Senate Avenue, Indianapolis, Indiana, 46204-2251, or call at (800)-451-6027, and ask for James Farrell or extension 3-8396, or dial (317) 233-8396.

Sincerely,

Original Signed By:
Nisha Sizemore, Chief
Permits Branch
Office of Air Quality

Attachments
JF

cc: File – St. Joseph County
U.S. EPA, Region V
St. Joseph County Health Department
Air Compliance Section Inspector – Rick Reynolds
Compliance Data Section
Administrative and Development
Technical Support and Modeling



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PART 70 MINOR SOURCE MODIFICATION OFFICE OF AIR QUALITY

**University of Notre Dame du Lac
100 Facilities Building
Notre Dame, Indiana 46556**

(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 No.: T141-7412-00013	
Issued by: Original Signed by Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: June 30, 2004 Expiration Date: June 30, 2009

First Minor Source Modification No.: T141-24306-00013	
Issued by: Original Signed By: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: April 10, 2007

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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(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary power plant for heating purposes and a dry cleaning operation.

Source Address:	100 Facilities Building, Notre Dame, Indiana, 46556
Mailing Address:	100 Facilities Building, Notre Dame, Indiana, 46556
General Source Phone Number:	(574) 631-6666
SIC Code:	8221
County Location:	St. Joseph
Source Location Status:	Nonattainment for ozone under the 8-hour standard Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major, under PSD and Emission Offset; Major Source, Section 112 of the Clean Air Act 1 of 28 categories

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

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

- (a) One (1) No.6 fuel oil or natural gas fired boiler constructed in 1961, identified as B-1, with a single low NOx burner and Economizer installed in 2006, and with a maximum design capacity of 137 MMBtu per hour heat input, exhausting to stack S-1;

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), boiler B-1, is considered an existing large liquid fuel affected source.

- (b) Two (2) coal or natural gas fired boilers constructed in 1952, identified as B-2 and B-3, with maximum design capacities of 96 MMBtu per hour heat input each, each equipped with low NOx burners when using natural gas, and cyclones, identified as D-1 and D-2, respectively, with both cyclones to be replaced by one (1) pulse jet fabric filter baghouse, identified as PJFF-1, for particulate control, when combusting coal. In addition, the following systems are connected to the baghouse PJFF-1: one (1) lime sorbent injection system, identified as SI-1, used for Hydrogen Chloride control and one (1) powdered activated carbon injection system, identified as SI-2, used for Mercury control. The opacity is measured by a certified continuous opacity monitor identified as COM1 when combusting coal, exhausting at stack S-1.

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), the boilers B-2 and B-3, are considered existing large solid fuel affected sources.

- (c) One (1) coal, No.2 fuel oil, or natural gas fired boiler constructed in 1966, identified as B-4, with a maximum design capacity of 234 MMBtu per hour heat input, equipped with an electrostatic precipitator, identified as E-1, with the electrostatic precipitator to be replaced by one (1) pulse jet fabric filter baghouse, identified as PJFF-2, for particulate control when combusting coal. In addition, the following systems are connected to the baghouse PJFF-2: one (1) lime sorbent injection system, identified as SI-1, used for Hydrogen Chloride control and one (1) powdered activated carbon injection system, identified as SI-2, used for Mercury control. The opacity is measured by a certified continuous opacity monitor identified as COM2 when combusting coal and/or oil, exhausting at stack S-2.

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), the boiler B-4, is considered an existing large solid fuel affected source.

- (d) One (1) No.2 fuel oil or natural gas boiler constructed in 1973, identified as B-5, with a maximum design capacity of 244.5 MMBtu per hour heat input, equipped with low NOx burners for natural gas and fuel oil, exhausting at stack S-3;

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), the boiler B-5, is considered an existing large liquid fuel affected source.

- (e) Two (2) diesel-fired generators constructed in 1953, identified as G-3 and G-4, with maximum design capacities of 13.70 MMBtu per hour heat input each, exhausting to stacks S-4 and S-5, respectively;
- (f) Three (3) diesel-fired generators, for which a construction permit was issued in 2003, identified as G-8, G-9 and G-10, each with a maximum rated capacity of 2,593 brake horsepower (6.59 MMBtu per hour heat input each), exhausting to stacks S-6, S-7 and S-8, respectively, with total additional generator capacity of 5.79 MW;
- (g) Dry cleaning operations, identified as DC-1, consisting of two (2) dry-to-dry systems using perchloroethylene, with a maximum amount of 1.0 gallon per day disposed of or sold. The air-perchloroethylene gas-vapor streams are routed through two (2) refrigerated condensers for control.
- (h) One (1) 249 MMBtu/hr boiler identified as B-6, equipped with a low NOx burner and flue gas recirculation (FGR), fired primarily on natural gas with No. 2 fuel oil used as backup fuel. The unit will exhaust through stack S-9 monitored by a certified COM and NOx CEM.

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), the boiler B-6, is considered a new large liquid fuel affected source.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

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

- (a) One (1) underground diesel fuel storage tank for which a construction permit was issued in 2003 for generators G-8, G-9 and G-10, identified as UST, with maximum storage capacity of 30,000 gallons. [326 IAC 12-1] [40 CFR 60, Subpart A]
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3]

- (c) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2]
- (d) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying; and woodworking operations. [326 IAC 6-3-2].
- (e) One (1) lime sorbent storage silo (Silo 1) controlled by one (1) bin vent filter (BVF-1).
- (f) One (1) powdered activated carbon (PAC) sorbent storage silo (Silo 2) controlled by one (1) bin vent filter (BVF-2).
- (g) One (1) fly and bottom ash storage silo (Ash Silo) controlled by one (1) bin vent filter (Ash Silo Bin Vent Filter).
- (h) Other activities or categories not previously identified that have emissions equal to that or less than insignificant thresholds [326 IAC 6-3-2]
 - (1) Long and short term coal storage piles, totaling 10.33 acres;
 - (2) One (1) 1200 ton coal handling facility;
 - (3) One (1) 450 ton coal bunker for boilers B-2 and B-3;
 - (4) One (1) 250 ton coal bunker for boiler B-4;
 - (5) One (1) 3200 cubic feet dry ash storage silo;
 - (6) Underground storage tanks: four at 50,000 gallons for No.2 fuel oil; five at 20,000 gallons for No.6 fuel oil, one at 20,000 gallons for diesel fuel; and one underground diesel fuel storage tank installed in 2003 for generators G-8, G-9 and G-10, identified as UST, with maximum storage capacity of 30,000 gallons;
 - (7) Five (5) 300 gallon diesel fuel day tanks for G-3, G-4, G-8, G-9 and G-10; and
 - (8) One (1) Maintenance Shop paint booth.

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); and
- (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 (T141-7412-00013) is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-7-7]

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

B.5 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. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.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 Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

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

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, 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 Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;

- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

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

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.
- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

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

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

- (a) All terms and conditions of permits 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 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:

- (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4] [326 IAC 2-7-8(e)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
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 in writing by IDEM, OAQ, any additional information identified as being needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]
[326 IAC 2-7-12 (b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

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

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

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
- (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

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

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

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b), (c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
- (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

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

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

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-30-3-1] [IC 13-17-3-2]

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

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

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

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Emission Limitations for Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

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

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

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

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 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) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.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)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within thirty (30) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within thirty (30) days, the Permittee may extend the compliance schedule related to the equipment for an additional thirty (30) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial thirty (30) days day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.11 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) The Permittee shall calibrate, maintain, and operate all necessary continuous opacity monitoring systems (COMS) and related equipment. For a boiler, the COMS shall be in operation at all times that the induced draft fan is in operation.
- (b) All COMS shall meet the performance specifications of 40 CFR 60, Appendix B, Performance Specification No. 1, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5.
- (c) In the event that a breakdown of a COMS occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (d) Whenever a COMS is malfunctioning or is down for maintenance or repairs for a period of twenty-four (24) hours or more and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMS, the Permittee shall provide a certified opacity reader, who may be an employee of the Permittee or an independent contractor, to self-monitor the emissions from the emission unit stack.
 - (1) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.
 - (2) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least twice per day during daylight operations, with at least four (4) hours between each set of readings, until a COMS is online.
 - (3) Method 9 readings may be discontinued once a COMS is online.
 - (4) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.
- (e) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5, and 40 CFR Part 60 and 40 CFR Part 63.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.13 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.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on December 9, 1996.
- (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.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

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

-
- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
 - (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
 - (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records;
 - (3) inspection of the control device, associated capture system, and the process.
 - (d) Failure to take reasonable response steps shall be considered a deviation from the permit.

- (e) The Permittee shall maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

- (a) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
 - (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
 - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

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

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2]
[326 IAC 2-3]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.
- (c) If there is a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
 - (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, document and maintain the following records:
 - (A) A description of the project.
 - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
 - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - (i) Baseline actual emissions;
 - (ii) Projected actual emissions;
 - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and 326 IAC 2-3-1(mm)(2)(A)(3); and
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
 - (2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
 - (3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]
[326 IAC 2-3]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:
- Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C- General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing Electric Utility Steam Generating unit, then for that project the Permittee shall:
- (1) Submit to IDEM, OAQ a copy of the information required by (c)(1) Section C- General Record Keeping Requirements.
 - (2) Submit a report to IDEM, OAQ within sixty (60) days after the end of each year during which records are generated in accordance with (c)(2) and (3) in Section C- General Record Keeping Requirements. The report shall contain all information and data describing the annual emissions for the emissions units during the calendar year that preceded the submission report.

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

- (g) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C- General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1 (II)) at an existing emissions unit other than an Electric Utility Steam Generating Unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:
- (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and

- (2) The emissions differ from the preconstruction projection as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(ii).

The report for a project at an existing emissions unit other than an Electric Utility Steam Generating Unit shall be submitted within sixty (60) days after the end of the year and contain the following:

- (1) The name, address, and telephone number of the major stationary source.
- (2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C- General Record Keeping Requirements.
- (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
- (4) Any other information that the Permittee deems fit to include in this report,

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

- (h) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1. [326 IAC 2-2-8(c) and/or 326 IAC 2-3-2(m)(6)]

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

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

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

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

- (a) One (1) No.6 fuel oil or natural gas fired boiler constructed in 1961, identified as B-1, with a single low NOx burner and Economizer installed in 2006, and with a maximum design capacity of 137 MMBtu per hour heat input, exhausting to stack S-1.

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), boiler B-1, is considered an existing large liquid fuel affected source.

(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 6.5-7]

- (a) Pursuant to 326 IAC 6.5-7 (Particulate emission limitations for sources in St. Joseph County) PM emissions from boiler B-1 shall not exceed 0.087 pounds of particulate matter per million British thermal unit's heat input.
- (b) Pursuant to 326 IAC 6.5-7 (Particulate emission limitations for sources in St. Joseph County) PM emissions from boilers B-1 through B-5 shall not exceed a total of 118.7 tons per year

D.1.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity from stack S-1 shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) 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.

D.1.3 Sulfur Dioxide Emission Limitations [326 IAC 7-1.1]

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations) the SO₂ emissions from boiler B-1 shall not exceed one and six tenths (1.6) pounds per MMBtu heat input when combusting No.6 fuel oil.

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

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for boiler B-1.

D.1.5 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD]

The 137 MMBtu/hr natural gas and No. 6 fuel oil fired boiler identified as B-1 is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, (40 CFR 63, Subpart DDDDD), as of the effective date of 40 CFR Part 63, Subpart DDDDD. Pursuant to this rule, the Permittee must comply with 40 CFR Part 63, Subpart DDDDD on and after September 13, 2007, three years after the date of publication of the final rule for 40 CFR Part 63, Subpart DDDDD in the Federal Register.

D.1.6 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the affected source, as designated by 40 CFR 63.7506(b).

Compliance Determination Requirements

D.1.7 Fuel Oil Sulfur Content Limit

To demonstrate compliance with condition D.1.1 when boiler B-1 combusts fuel oil, the sulfur content of the fuel oil combusted shall not exceed 1.06 percent.

D.1.8 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-1.1-2]

- (a) Pursuant to 326 IAC 7-2-1(c)(3), the Permittee shall demonstrate that when combusting fuel oil in B-1, the sulfur dioxide emissions do not exceed the equivalent of 1.6 pounds per MMBtu, using a calendar month average.
- (b) Pursuant to 326 IAC 7-2-1(e) and 326 IAC 3-7-4, fuel sampling and analysis data shall be collected as follows:
 - (1) The Permittee may, with the prior approval of the department, modify the procedures specified in 326 IAC 3-7-4(a), use alternate equivalent procedures, or rely upon vendor analysis of fuel delivered, if accompanied by a vendor certification [326 IAC 3-7-4(b)]; or,
 - (2) The Permittee shall perform sampling and analysis of fuel oil samples in accordance with 326 IAC 3-7-4(a).
 - (A) Oil samples shall be collected from the tanker truck load prior to transferring fuel to the storage tank; or
 - (B) Oil samples shall be collected from the storage tank immediately after each addition of fuel to the tank.
- (c) Upon written notification to IDEM by a facility owner or operator, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5 may be used as the means for determining compliance with the emission limitations in 326 IAC 7. Upon such notification, the other requirements of 326 IAC 7-2 shall not apply. [326 IAC 7-2-1(g)]

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

D.1.9 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

When boiler B-1 is the only boiler exhausting to stack S-1, and it is combusting fuel oil:

- (a) Visible emission (VE) notations of the stack exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) If abnormal emissions are observed at the stack exhaust, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions and Exceedances. Observation of abnormal emissions that do not violate an applicable opacity limit is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation of this permit.
- (c) “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) 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 the boiler.

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 compliance with the SO₂ Conditions D.1.3 and D.1.8, the Permittee shall maintain records in accordance with (1) through (6) below. Records shall be complete and sufficient to establish compliance with the SO₂ limit as required in Conditions D.1.3 and D.1.8.

- (1) Calendar dates covered in the compliance determination period;
- (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
- (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications;
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

- (b) To document compliance with condition D.1.9, the Permittee shall maintain records of once per day visible emission notations of stack exhaust S-1, if boiler B-1 is the only boiler in operation for stack S-1, and it is combusting fuel oil.
- (c) Boiler B-1 is subject to notification requirements provided in 40 CFR Part 63, Subpart DDDDD. Compliance will be demonstrated in accordance with Subpart DDDDD provisions.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.11 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.3 in any compliance period when fuel oil was combusted, and the natural gas fired boiler certification, shall be submitted to the address listed in Section C - General Reporting Requirements, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 FACILITY OPERATION CONDITIONS

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

- (b) Two (2) coal or natural gas fired boilers constructed in 1952, identified as B-2 and B-3, with maximum design capacities of 96 MMBtu per hour heat input each, each equipped with low NO_x burners when using natural gas, and cyclones, identified as D-1 and D-2, respectively, with both cyclones to be replaced by one (1) pulse jet fabric filter baghouse, identified as PJFF-1, for particulate control, when combusting coal. In addition, the following systems are connected to the baghouse PJFF-1: one (1) lime sorbent injection system, identified as SI-1, used for Hydrogen Chloride control and one (1) powdered activated carbon injection system, identified as SI-2, used for Mercury control. The opacity is measured by a certified continuous opacity monitor identified as COM1 when combusting coal, exhausting at stack S-1.

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), the boilers B-2 and B-3, are considered existing large solid fuel affected sources.

(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 Particulate Matter Limitation (PM) [326 IAC 6.5-7]

- (a) Pursuant to 326 IAC 6.5-7 (Particulate emission limitations for sources in St. Joseph County) PM emissions from boilers B-2 and B-3 shall not exceed 0.28 pounds of particulate matter per million British thermal units heat input each.
- (b) Pursuant to 326 IAC 6.5-7 (Particulate emission limitations for sources in St. Joseph County) PM emissions from boilers B-1 through B-5 shall not exceed a total of 118.7 tons per year.

D.2.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity from stack S-1 shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) 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.

D.2.3 Sulfur Dioxide Emission Limitations [326 IAC 7-1.1]

Pursuant to 326 IAC 7-1.1-2, sulfur dioxide emissions from boilers B-2 and B-3 shall not exceed 6.0 pounds per million British thermal units (lb/MMBtu) of heat input each.

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

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for boilers B-2 and B-3 and their control devices.

Compliance Determination Requirements

D.2.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Within 180 days upon initial operation of the baghouse PJFF-1, compliance with the PM limitations in Condition D.2.1 shall be determined by a performance stack test conducted while B-2 and B-3 are combusting coal utilizing methods as approved by the Commissioner. 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 Section C - Performance Testing.

D.2.6 Continuous Emissions Monitoring [326 IAC 3-5]

- (a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), the continuous opacity monitoring system (COM1) used for measuring opacity from B-2 and/or B-3 when combusting coal shall be calibrated, maintained, and operated for measuring opacity which meet all applicable performance specifications of 326 IAC 3-5-2.
- (b) The continuous opacity monitoring system (COM1) is subject to the monitor system certification requirements pursuant to 326 IAC 3-5-3.
- (c) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate the continuous opacity monitoring system (COM1) pursuant to 326 IAC 3-5.

D.2.7 Operation of Control Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule or in this permit, the cyclones, D1 and D2, or pulse jet fabric filter baghouse, identified as PJFF-1, shall be operated at all times that their respective boilers, B-2 and/or B-3 are in operation and combusting coal.

D.2.8 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-1.1-2]

- (a) Pursuant to 326 IAC 7-2-1(c)(2), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the equivalent of six (6.0) pounds per MMBtu from each boiler, B-2 and B-3, when combusting coal, or when combusting coal simultaneously with another fuel, using a thirty (30) day calendar average.
- (b) Pursuant to 326 IAC 7-2-1(e) and 326 IAC 3-7, coal sampling and analysis data shall be collected as follows:
 - (1) Coal sampling shall be performed using the methods specified in 326 IAC 3-7-2(a), and sample preparation and analysis shall be performed as specified in 326 IAC 3-7-2(c), (d) and (e); or
 - (2) Pursuant to 326 IAC 3-7-2(b)(2) and 326 IAC 3-7-3, manual or other non-ASTM automatic sampling and analysis procedures may be used upon a demonstration, submitted to the department for approval, that such procedures provide sulfur dioxide emission estimates representative either of estimates based on coal sampling and analysis procedures specified in 326 IAC 3-7-2 or of continuous emissions monitoring; or
 - (3) The Permittee shall meet the minimum sampling requirements specified in 326 IAC 3-7-2(b)(3), and sample preparation and analysis shall be performed as specified in 326 IAC 3-7-2 (c), (d) and (e).
- (c) Upon written notification to IDEM by a facility owner or operator, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5 may be used as the means for determining compliance with the emission limitations in 326 IAC 7. Upon such notification, the other requirements of 326 IAC 7-2 shall not apply. [326 IAC 7-2-1(g)]

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

D.2.9 Opacity Readings [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

While boilers B-2 and/or B-3 are operating and combusting coal:

- (a) In the event of opacity exceeding twenty percent (20%) average opacity for three (3) consecutive six (6) minute averaging periods, appropriate response steps shall be taken in accordance with Section C - Response to Excursions and Exceedances such that the cause(s) of the excursion are identified and corrected and opacity levels are brought back below twenty percent (20%). Examples of expected response steps may include, but are not limited to, boiler loads being reduced.
- (b) Opacity readings in excess of twenty percent (20%) but not exceeding the opacity limit for boilers B-2 and B-3 when combusting coal, are not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation of this permit.

This Condition D.2.9 shall cease to apply on and after September 13, 2008.

D.2.10 Bag Leak Detection Systems (BLDS)

Prior to September 13, 2008, the Permittee shall comply with the following requirements:

- (a) The Permittee shall install and operate a continuous bag leak detection system (BLDS) for the pulse jet fabric filter baghouse, identified as PJFF-1. The bag leak detection system shall meet the following requirements:
 - (i) The Permittee must install and operate a bag leak detection system for each exhaust stack of the fabric filter.
 - (ii) The 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.
 - (iii) 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.
 - (iv) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.
 - (v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
 - (vi) 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.
 - (vii) 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.
 - (viii) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

- (b) If operations continue after bag failure is observed and it will be 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.2.11 Monitoring: Cyclones [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) The ability of the cyclones, D-1 and D-2, to control particulate emissions shall be monitored at least once per day, when their respective boilers, B-2 and B-3, are in operation and combusting coal, by measuring and recording the total static pressure drop across the units.
- (b) Reasonable response steps shall be taken in accordance with Section C - Response to Excursions and Exceedances whenever the static pressure drop is outside of the normal operating range for the corresponding boiler steam load. A pressure drop reading that is outside normal range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation of this permit.

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

D.2.12 Record Keeping Requirements

- (a) To document compliance with Conditions D.2.1, D.2.2, D.2.6, D.2.9 and D.2.11, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits established in Conditions D.2.1, D.2.2, D.2.6, D.2.9 and D.2.11.
 - (1) Data and results from the most recent stack test.
 - (2) All continuous opacity monitoring data (COM1), pursuant to 326 IAC 3-5-6.
 - (3) The results of all visible emission (VE) notations and Method 9 visible emission readings taken at stack S-1 during any periods of COM1 downtime.
 - (4) All cyclone (D-1 and D-2) parametric monitoring readings.
- (b) To document compliance with SO₂ Conditions D.2.3 and D.2.8, the Permittee shall maintain records in accordance with (1) and (2) below. Records shall be complete and sufficient to establish compliance with the SO₂ limits as required in Conditions D.2.3 and D.2.8.
 - (1) All fuel sampling and analysis data, pursuant to 326 IAC 7-2.
 - (2) Actual fuel usage since last compliance determination period.
- (c) Pursuant to 326 IAC 3-7-5(a), owners or operators of sources with total coal-fired capacity greater than or equal to one hundred (100) MMBtu per hour actual heat input shall develop a standard operating procedure (SOP) to be followed for sampling, handling, analysis, quality control, quality assurance, and data reporting of the information collected pursuant to 326 IAC 3-7-2 through 326 IAC 3-7-4. In addition, any revision to the SOP shall be submitted to IDEM, OAQ.
- (d) To document compliance with condition D.2.10, the Permittee shall maintain records of the dates and times of all bag leak detection system alarms, the cause of each alarm, and an explanation of all corrective actions taken.

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

D.2.13 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Conditions D.2.1 and D.2.3 in any compliance period when coal was combusted shall be submitted to the address listed in Section C - General Reporting Requirements, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) A quarterly report of opacity exceedances, during operation of B-2 and/or B-3 during coal combustion, to document compliance with Conditions D.2.2 and D.2.6, shall be submitted to the address listed in Section C - General Reporting Requirements, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) For boilers B-2 and B-3, a quarterly report of the calendar month average coal sulfur content, coal heat content, and sulfur dioxide emission rate in pounds per million Btus and the total monthly coal consumption shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported to document compliance with Condition D.2.8. [326 IAC 7-2-1(c)(2)]

The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (d) Pursuant to 326 IAC 3-5-7(5), reporting of continuous monitoring system (COM1) instrument downtime, except for zero (0) and span checks, which shall be reported separately, shall include the following:
 - (1) Date of downtime.
 - (2) Time of commencement.
 - (3) Duration of each downtime.
 - (4) Reasons for each downtime.
 - (5) Nature of system repairs and adjustments.

The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

SECTION D.3 FACILITY OPERATION CONDITIONS

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

- (c) One (1) coal, No.2 fuel oil, or natural gas fired boiler constructed in 1966, identified as B-4, with a maximum design capacity of 234 MMBtu per hour heat input, equipped with an electrostatic precipitator, identified as E-1, with the electrostatic precipitator to be replaced by one (1) pulse jet fabric filter baghouse, identified as PJFF-2, for particulate control when combusting coal. In addition, the following systems are connected to the baghouse PJFF-2: one (1) lime sorbent injection system, identified as SI-1, used for Hydrogen Chloride control and one (1) powdered activated carbon injection system, identified as SI-2, used for Mercury control. The opacity is measured by a certified continuous opacity monitor identified as COM2 when combusting coal and/or oil, exhausting at stack S-2.

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), the boiler B-4, is considered an existing large solid fuel affected source.

(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 Particulate Matter Limitation (PM) [326 IAC 6.5-7]

- (a) Pursuant to 326 IAC 6.5-7 (Particulate emission limitations for sources in St. Joseph County) PM emission limitations for boiler B-4 shall not exceed 0.17 pounds of particulate matter per million British thermal units heat input.
- (b) Pursuant to 326 IAC 6.5-7 (Particulate emission limitations for sources in St. Joseph County) PM emissions from boilers B-1 through B-5 shall not exceed a total of 118.7 tons per year.

D.3.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity from stack S-2 shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) 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.

D.3.3 Sulfur Dioxide Emission Limitations [326 IAC 7-1.1-2]

Pursuant to 326 IAC 7-1.1-2, sulfur dioxide emissions from boiler B-4 shall not exceed the following limits:

- (a) For facilities combusting coal and oil simultaneously: six and zero-tenths (6.0) pounds per million British thermal units (lb/MMBtu) of heat input.
- (b) Distillate fuel combustion: 0.5 pounds per million British thermal units (lb/MMBtu) of heat input.

D.3.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for boiler B-4, and its control devices.

Compliance Determination Requirements

D.3.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Within 180 days upon initial operation of the baghouse PJFF-2, compliance with the PM limitations in Condition D.3.1 shall be determined by a performance stack test conducted, while B-4 combusts coal, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

D.3.6 Operation of Control Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, the electrostatic precipitator (ESP) E-1, or pulse jet fabric filter baghouse, identified as PJFF-2, shall be operated at all times that boiler B-4 vented to the ESP is in operation and combusting coal.

D.3.7 Continuous Emissions Monitoring [326 IAC 3-5]

- (a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), the continuous opacity monitoring system (COM2) for boiler B-4, when combusting fuel oil or coal, shall be calibrated, maintained, and operated for measuring opacity which meet all applicable performance specifications of 326 IAC 3-5-2.
- (b) The continuous opacity monitoring system (COM2) is subject to the monitor system certification requirements pursuant to 326 IAC 3-5-3.
- (c) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate the continuous opacity monitoring system (COM2) pursuant to 326 IAC 3-5.

D.3.8 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-1.1-2]

- (a) Pursuant to 326 IAC 7-2-1(c)(2), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the equivalent of six (6.0) pounds per MMBtu from boiler B-4 when combusting coal, or when combusting coal simultaneously with another fuel, using a calendar month average.
- (b) Pursuant to 326 IAC 7-2-1(e) and 326 IAC 3-7, coal sampling and analysis data shall be collected as follows:
 - (1) Coal sampling shall be performed using the methods specified in 326 IAC 3-7-2(a), and sample preparation and analysis shall be performed as specified in 326 IAC 3-7-2(c), (d) and (e); or
 - (2) Pursuant to 326 IAC 3-7-2(b)(2) and 326 IAC 3-7-3, manual or other non-ASTM automatic sampling and analysis procedures may be used upon a demonstration, submitted to the department for approval, that such procedures provide sulfur dioxide emission estimates representative either of estimates based on coal sampling and analysis procedures specified in 326 IAC 3-7-2 or of continuous emissions monitoring; or
 - (3) The Permittee shall meet the minimum sampling requirements specified in 326 IAC 3-7-2(b)(3), and sample preparation and analysis shall be performed as specified in 326 IAC 3-7-2 (c), (d) and (e).

- (c) Upon written notification to IDEM by a facility owner or operator, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5 may be used as the means for determining compliance with the emission limitations in 326 IAC 7. Upon such notification, the other requirements of 326 IAC 7-2 shall not apply. [326 IAC 7-2-1(g)]

D.3.9 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3][326 IAC 7-2][326 IAC 7-1.1-2]

Compliance shall be determined for boiler B-4 when using distillate oil (No.2 fuel oil), or fuel oil in combination with natural gas, by utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per MMBtu by:
- (1) Providing vendor analysis of fuel delivered, if accompanied by a certification, or analyses from approved modified procedures specified in 326 IAC 3-7-4(a), or the use of alternate equivalent procedures, as implemented;
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from boiler B-4 when using distillate fuel, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

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

D.3.10 Alstom Switched Integrated Rectifier (SIR) Unit [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 boiler B-4 is in operation and combusting coal, by measuring and recording the number of SIR Units in service, their primary and secondary voltages, and their currents.
- (b) Reasonable response steps shall be taken in accordance with Section C - Response to Excursions and Exceedances, and Reports whenever the percentage of SIR Units in service falls below 50 percent (50%). SI R Unit failure resulting in less than 50 percent (50%) availability is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances shall be considered a deviation of this permit.

D.3.11 Opacity Readings [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

While boiler B-4 is operating and combusting coal or fuel oil;

- (a) In the event of opacity exceeding twenty percent (20%) for three (3) consecutive six (6) minute averaging periods, appropriate response steps shall be taken in accordance with Section C - Response to Excursions and Exceedances such that the cause(s) of the excursion are identified and corrected and opacity levels are brought back below twenty percent (20%). Examples of expected response steps include, but are not limited to, boiler loads being reduced, adjustment of flue gas conditioning rate, and SIR Units being returned to service.
- (b) Opacity readings in excess of twenty percent (20%) but not exceeding the opacity limit for

boiler B-4 are not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions and Exceedances, shall be considered a deviation of this permit.

This Condition D.3.11 shall cease to apply on and after September 13, 2008.

D.3.12 Bag Leak Detection Systems (BLDS)

Prior to September 13, 2008, the Permittee shall comply with the following requirements:

- (a) The Permittee shall install and operate a continuous bag leak detection system (BLDS) for the pulse jet fabric filter baghouse, identified as PJFF-2. The bag leak detection system shall meet the following requirements:
 - (i) The Permittee must install and operate a bag leak detection system for each exhaust stack of the fabric filter.
 - (ii) The 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.
 - (iii) 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.
 - (iv) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.
 - (v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
 - (vi) 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.
 - (vii) 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.
 - (viii) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.
- (b) If operations continue after bag failure is observed and it will be 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.

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

D.3.13 Record Keeping Requirements

- (a) To document compliance with Conditions D.3.1, D.3.2, D.3.7, D.3.10 and D.3.11, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits established in Conditions D.3.1, D.3.2, D.3.7, D.3.10 and D.3.11.
- (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 visible emission (VE) notations readings taken during any periods of COM2 downtime.
 - (4) All SIR Unit monitoring.
- (b) To document compliance with SO₂ Conditions D.3.3(a) and D.3.8, the Permittee shall maintain records in accordance with (1) and (2) below. Records shall be complete and sufficient to establish compliance with the SO₂ limits as required in Conditions D.3.3(a) and D.3.8.
- (1) All fuel sampling and analysis data, pursuant to 326 IAC 7-2.
 - (2) Actual fuel usage since last compliance determination period.
- (c) To document compliance with the SO₂ Conditions D.3.3(b) and D.3.9, the Permittee shall maintain records in accordance with (1) through (6) below. Records shall be complete and sufficient to establish compliance with the SO₂ limit as required in Conditions D.3.3(b) and D.3.9.
- (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
 - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and
- If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:
- (4) Fuel supplier certifications;
 - (5) The name of the fuel supplier; and
 - (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (d) Pursuant to 326 IAC 3-7-5(a), owners or operators of sources with total coal-fired capacity

greater than or equal to one hundred (100) MMBtu per hour actual heat input shall develop a standard operating procedure (SOP) to be followed for sampling, handling, analysis, quality control, quality assurance, and data reporting of the information collected pursuant to 326 IAC 3-7-2 through 326 IAC 3-7-4. In addition, any revision to the SOP shall be submitted to IDEM, OAQ.

- (e) To document compliance with condition D.3.12, the Permittee shall maintain records of the dates and times of all bag leak detection system alarms, the cause of each alarm, and an explanation of all corrective actions taken.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.14 Reporting Requirements

- (a) A quarterly report of opacity exceedances and a quarterly summary of the information to document compliance with Conditions D.3.1, D.3.2, D.3.3, D.3.9, and D.3.11 shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.
- (b) A quarterly report of the calendar month average coal sulfur content, coal heat content, and sulfur dioxide emission rate in pounds per million Btus and the total monthly coal consumption shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported to document compliance with D.3.8. [326 IAC 7-2-1(c)(2)]

The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Pursuant to 326 IAC 3-5-7(5), reporting of continuous monitoring system (COM2) instrument downtime, except for zero (0) and span checks, which shall be reported separately, shall include the following:
 - (1) Date of downtime.
 - (2) Time of commencement.
 - (3) Duration of each downtime.
 - (4) Reasons for each downtime.
 - (5) Nature of system repairs and adjustments.

The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

- (d) One (1) No.2 fuel oil or natural gas boiler constructed in 1973, identified as B-5, with a maximum design capacity of 244.5 MMBtu per hour heat input, equipped with low NOx burners for natural gas and fuel oil, exhausting at stack S-3.

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), the boiler B-5, is considered an existing large liquid fuel affected source.

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Particulate Matter Limitation (PM) [326 IAC 6.5-7]

- (a) Pursuant to 326 IAC 6.5-7 (Particulate emission limitations for sources in St. Joseph County), PM emission limitations for boiler B-5 shall not exceed 0.02 pounds of particulate matter per million British thermal units heat input.
- (b) Pursuant to 326 IAC 6.5-7 (Particulate emission limitations for sources in St. Joseph County) PM emissions from boilers B-1 through B-5 shall not exceed a total of 118.7 tons per year.

D.4.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity from stack S-3 shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) 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.

D.4.3 Sulfur Dioxide Emission Limitations [326 IAC 7-1.1-2]

Pursuant to 326 IAC 7-1.1-2, sulfur dioxide emissions from boiler B-5 shall not exceed 0.5 pounds per million British thermal units (lb/MMBtu) of heat input when using distillate oil.

D.4.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for boiler B-5.

Compliance Determination Requirements

D.4.5 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3][326 IAC 7-2][326 IAC 7-1.1-2]

Compliance shall be determined for boiler B-5 when using distillate oil (No.2 fuel oil), or fuel oil in combination with natural gas, by utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per MMBtu heat input by:
- (1) Providing vendor analysis of fuel delivered, if accompanied by a certification, or

analyses from approved modified procedures specified in 326 IAC 3-7-4(a), or the use of alternate equivalent procedures, as implemented;

- (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from boiler B-5 when using distillate fuel, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

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

D.4.6 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) Visible emission (VE) notations of the boiler B-5 stack exhaust, S-3, shall be performed once per day during normal daylight operations while combusting fuel oil. A trained employee shall record whether emissions are normal or abnormal.
- (b) If abnormal emissions are observed at any boiler exhaust, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions and Exceedances. Observation of abnormal emissions that do not violate an applicable opacity limit is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation of this permit.
- (c) "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) 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 the boiler.

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

D.4.7 Record Keeping Requirements

- (a) To document compliance with Condition D.4.3, the Permittee shall maintain records in accordance with (1) through (6) below:
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Calendar month average sulfur content, fuel consumption, and sulfur dioxide emission rate in pounds per MMBtu;
 - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

If the fuel supplier certification is used to demonstrate compliance the following, as a

minimum, shall be maintained:

- (4) Fuel supplier certifications;
 - (5) The name of the fuel supplier; and
 - (6) A statement from the fuel supplier that certifies the sulfur content, and heat content of the fuel oil.
- (b) To document compliance with Condition D.4.6, the Permittee shall maintain records of once per day visible emission notations of the boiler B-5 stack exhaust, S-3.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.8 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.4.1 and D.4.3, and the Natural Gas Boiler Certification shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.5 FACILITY OPERATION CONDITIONS

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

- (e) Two (2) diesel-fired generators constructed in 1953, identified as G-3 and G-4, with maximum design ratings of 13.70 MMBtu per hour heat input each, exhausting to stacks S-4 and S-5, respectively.
- (f) Three (3) diesel-fired generators, for which a construction permit was issued in 2003, identified as G-8, G-9 and G-10, each with a maximum rated capacity of 2,593 brake horsepower (6.59 MMBtu per hour heat input each), exhausting to stacks S-6, S-7 and S-8, respectively, with total additional generator capacity of 5.79 MW.

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

General Construction Conditions for Generators G-8, G-9 and G-10

D.5.1 Effective Date of the Permit [IC 13-15-5-3]

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, and IC 13-15-5-3, the PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, became effective upon its issuance.

D.5.2 Permit Expiration Date [326 IAC 2-2-8(a)(1)]

Pursuant to 326 IAC 2-2-8(a)(1) (PSD Requirements: Source Obligation), the PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, to construct shall expire if construction is not commenced within eighteen (18) months after receipt of the PSD Significant Source Modification approval or if construction is discontinued for a continuous period of eighteen (18) months or more, or if construction is not completed within reasonable time. IDEM may extend the eighteen (18) month period upon satisfactory showing that an extension is justified.

D.5.3 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a) The affidavit of construction attached to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the PSD Significant Source Modification application or the permit. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emissions units differs from the construction proposed in the PSD Significant Source Modification application or the permit in a manner that is regulated under the provisions of 326 IAC 2-2, the source may not begin operation until the source modification has been revised pursuant to the provisions of that rule and the provisions of 326 IAC 2-2 and an Operation Permit Validation Letter is issued.
- (c) If actual construction of the emissions units differs from the construction proposed in the PSD Significant Source Modification application or the permit in a manner that is not regulated under the provisions of 326 IAC 2-2, the source may not begin operation until the source modification has been revised pursuant to the provisions of 326 IAC 2-7-10.5 and the provisions of 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.

- (d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

Operation Conditions for the Generators

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.4 Emission Limitations for Diesel-Fired Generators [326 IAC 2-2]

- (a) Pursuant to PSD Significant Source Modification 141-15828-00013, issued on April 30, 2003, and 326 IAC 2-2-2 (PSD requirements: Applicability) in order to render the requirements of 326 IAC 2-2 PSD not applicable for PM10 emissions, the combined fuel usage from the diesel-fired generator units (G-8, G-9, and G-10) shall be limited to less than 3,076,600 gallons of diesel fuel per twelve (12) consecutive month period, with compliance determined at the end of each month. PM10 emissions shall not exceed 0.0097 lb PM10/gallon diesel oil burned. This usage limit will limit PM10 (including filterable and condensable) emissions from the diesel-fired generators (G-8, G-9 and G-10) combined to less than 15 tons per year.
- (b) Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, and 326 IAC 2-2-5 and 2-2-6 (PSD Requirements: Air quality impacts and increment consumption);
- (1) NO_x emissions from each diesel-fired generator unit (G-8, G-9, and G-10) shall be controlled using retarded ignition timing, and shall not exceed 37.44 pounds per hour.
- (2) SO₂ emissions from each diesel-fired generator unit (G-8, G-9, and G-10) shall not exceed 6.7 pounds per hour.

D.5.5 Particulate Emission Limitations [326 IAC 6-1-2]

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, for generators G-8, G-9, and G-10, and 326 IAC 6-1-2 (a), particulate matter emissions from the each of the diesel fired generators shall not exceed 0.03 grain per dry standard cubic foot.

D.5.6 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to the agreed order 04-A-J-3402 and 326 IAC 6-3-2 the particulate emission rate for generators G-3 and G-4 shall be determined by the table in 326 IAC 6-3-2(e) or the following equation:

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

D.5.7 Sulfur Dioxide Emission Limitations [326 IAC 7-1.1-1] [326 IAC 7-2-1]

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, and 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations) for generators G-8, G-9, and G-10, and this permit for generators G-3 and G-4, SO₂ emissions from the diesel-fired generators shall not exceed five tenths (0.5) pounds per MMBtu heat input. Pursuant to 326 IAC 7-2-1(c)(3) compliance shall be demonstrated on a calendar month average sulfur content, heat content, fuel consumption, and sulfur dioxide emission rate in pounds per million Btus.

D.5.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan of this permit, is required for these generators.

Compliance Determination Requirements

D.5.9 Sulfur Dioxide Emissions and Sulfur Content

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, for generators G-8, G-9, and G-10, and this permit for G-3 and G-4, compliance shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions from each of the diesel-fired generators do not exceed five-tenths (0.5) pounds per million Btu heat input by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification, or analyses from approved modified procedures specified in 326 IAC 3-7-4(a), or the use of alternate equivalent procedures, as implemented;
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the diesel-fired generators, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

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

D.5.10 Visible Emissions Notations

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, for generators G-8, G-9, and G-10, and this permit for G-3 and G-4;

- (a) Visible emission notations of the generator stack exhausts (S-4, S-5, S-6, S-7, and S-8) shall be performed once per working day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) 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.
- (d) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.5.11 Record Keeping Requirements

- (a) To document compliance with Condition D.5.4(a), the Permittee shall record the monthly fuel usage of the diesel-fired generators (G-8, G-9, and G-10) combined. The records shall be complete and sufficient to establish compliance with the PM10 limit established in Condition D.5.4(a).
- (b) To document compliance with Conditions D.5.4(b)(2) and D.5.7, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly, and shall be complete and sufficient to establish compliance with the SO₂ emission limits established in Conditions D.5.4(b)(2) and D.5.7.
- (1) Calendar dates covered in the compliance determination period;
 - (2) Calendar month average sulfur content, fuel consumption, and sulfur dioxide emission rate in pounds per MMBtu;
 - (3) Actual diesel fuel usage since last compliance determination period and equivalent SO₂ emissions; and
- If the fuel supplier certification is used to demonstrate compliance, when burning alternate fuels and not determining compliance pursuant to 326 IAC 3-7-4, the following, as a minimum, shall be maintained:
- (4) Fuel supplier certifications;
 - (5) The name of the fuel supplier; and,
 - (6) A statement from the fuel supplier that certifies the sulfur content of the diesel fuel.
- (c) To document compliance with Condition D.5.10, the Permittee shall maintain once per working day records of visible emission notations of the generator stack exhausts (S-4, S-5, S-6, S-7, and S-8).
- (d) All records shall be maintained in accordance with Section C - General Record Keeping.

D.5.12 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.5.4 (a) and D.5.7 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.6 FACILITY OPERATION CONDITIONS

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

- (g) Dry cleaning operations, identified as DC-1, consisting of two (2) dry-to-dry systems using perchloroethylene, with a maximum amount of 1.0 gallon per day disposed of or sold. The air-perchloroethylene gas-vapor streams are routed through two (2) refrigerated condensers for control.

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR 63, Subpart A]

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 M.

D.6.2 Perchloroethylene Dry Cleaning Facilities NESHAP [326 IAC 20-7-1][40 CFR 63, Subpart M]

- (a) The dry cleaning facility, identified as DC-1, is subject to 40 CFR 63, Subpart M, which is incorporated by reference as 326 IAC 20-7-1.
- (b) The Permittee shall comply with the following conditions:
- (1) Route the air-perchloroethylene gas-vapor stream contained within each dry cleaning machine through a refrigerated condenser or an equivalent control device as determined according to the procedures listed in 40 CFR 63.325;
 - (2) Close the door of each dry cleaning machine immediately after transferring articles to or from the machine, and keep the door closed at all other times;
 - (3) Operate and maintain each dry cleaning system according to the manufacturer's specifications and recommendations; and
 - (4) Store all perchloroethylene and wastes that contain perchloroethylene in solvent tanks or solvent containers with no perceptible leaks.
- (c) Each refrigerated condenser:
- (1) Shall be operated to not vent or release the air-perchloroethylene gas-vapor stream contained within each dry cleaning machine to the atmosphere while the dry cleaning machine drum is rotating; and
 - (2) Shall be operated with a diverter valve, if air can pass through the refrigerated condenser when the machine door is open.

D.6.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

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

D.6.4 Monitoring [40 CFR 63.322 and 63.323]

- (a) The Permittee shall minimize leaks of perchloroethylene by the following steps:
- (1) Inspect the following components weekly for perceptible leaks while the dry cleaning system is operating:
 - (A) Hose and pipe connections, fittings, couplings, and valves;
 - (B) Door gaskets and seatings;
 - (C) Filter gaskets and seatings;
 - (D) Pumps;
 - (E) Solvent tanks and containers;
 - (F) Water separators;
 - (G) Muck cookers;
 - (H) Stills;
 - (I) Exhaust dampers;
 - (J) Diverter valves; and
 - (K) Cartridge filter housings.
 - (2) Repair all perceptible leaks detected during the inspections required in (1) within 24 hours. If repair parts must be ordered, either a written or verbal order for those parts shall be initiated within two (2) working days of detecting such a leak. Such repair parts shall be installed within five (5) working days after receipt.
- (b) The Permittee shall measure the temperature of the air-perchloroethylene gas-vapor stream on the outlet side of each refrigerated condenser weekly during the last cool down cycle prior to opening the machine door, with a temperature sensor to determine if it is equal to or less than 7.2 °C (45°F). The temperature sensor shall be used according to the manufacturer's instruction and shall be designed to measure a temperature of 7.2°C (45 °F) to an accuracy of ±1.1°C (±2°F).

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

D.6.5 Record Keeping Requirement [40 CFR 63.323(d), 63.324(d) & (e)]

- (a) The Permittee shall keep receipts of perchloroethylene purchases and a log of the following information and maintain such information on site and show upon request for a period of five (5) years:
- (1) The volume of perchloroethylene purchased each month by the dry cleaning facility as recorded from perchloroethylene purchases; if no perchloroethylene is purchased during a given month then the Permittee would enter zero gallons into the log;
 - (2) The calculation and result of the yearly perchloroethylene consumption determined on the first day of each month performed as follows:
 - (A) Sum the volume of all perchloroethylene purchases made in each of the previous twelve (12) months, as recorded in the log described in Condition D.6.5(a)(1).
 - (B) If no perchloroethylene purchases were made in a given month, then the perchloroethylene consumption for that month is zero gallons.
 - (C) The total sum calculated is the yearly perchloroethylene consumption at the facility.

- (3) The dates when the dry cleaning system components are inspected for perceptible leaks, as specified in Condition 6.4(a)(1), and the name or location of dry cleaning system components where perceptible leaks are detected;
 - (4) The dates of repair and records of written or verbal orders for repair parts associated with leak repair and any temperature adjustments, to demonstrate compliance with Condition 6.4(a)(2) and (b); and
 - (5) The date and temperature sensor monitoring results including actions taken to correct temperature exceedances for each refrigerated condenser, as specified in Condition 6.4(b).
- (b) The Permittee shall retain onsite a copy of the design specifications and the operating manuals for each dry cleaning system and each emission control device located at the dry cleaning facility.
 - (c) All records shall be maintained in accordance with Section C - General Record Keeping.

D.6.6 Reporting Requirements

- (a) Upon issuance of this permit, the Permittee shall submit within thirty (30) days, to the address listed in Section C - General Reporting Requirements, a notification of compliance status providing the following information and signed by the responsible official who shall certify its accuracy:
 - (1) The yearly perchloroethylene solvent consumption limit based upon the yearly solvent consumption calculated according to 40 CFR 63.323(d);
 - (2) Whether or not they are in compliance with each applicable requirement of 40 CFR 63.322; and
 - (3) All information contained in the statement is accurate and true.
- (b) Should the high twelve month rolling total of perchloroethylene purchases exceed 2,100 gallons, the Permittee shall notify the IDEM, OAQ of this change in facility status.
- (c) The reports required in (a) and (b) of this condition shall be submitted to:

Indiana Department of Environmental
Management Compliance Data Section,
Office of Air Quality 100 North Senate
Avenue,
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

SECTION D.7 FACILITY OPERATION CONDITIONS

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

- (h) One (1) 249 MMBtu/hr boiler identified as B-6, equipped with a low NOx burner and flue gas recirculation (FGR), fired primarily on natural gas with No. 2 fuel oil used as backup fuel. The unit will exhaust through stack S-9 monitored by a certified COM and certified NOx CEM.

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), the boiler B-6, is considered a new large liquid fuel affected source.

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Particulate Matter Limitation (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 total PM emissions from B-6 shall not exceed 0.15 pounds per MMBtu on No. 2 fuel oil or 0.01 grains per dry standard cubic foot on natural gas.

D.7.2 Particulate Matter (PM₁₀) Emission Limitations [326 IAC 2-2-6]

Pursuant to 326 IAC 2-2-5 and 2-2-6 (PSD Requirements), PM₁₀ emissions from B-6 shall be limited to less than 0.014 lb/MMBtu and 15.58 tons per twelve (12) month consecutive period when burning No. 2 fuel oil or 0.008 lb/MMBtu and 8.29 tons per twelve (12) month consecutive period when burning natural gas.

D.7.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity from stack S/V 9 shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) 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.

D.7.4 Sulfur Dioxide Emission Limitations [326 IAC 2-2-5, 2-2-6]

Pursuant to 326 IAC 2-2-5 and 2-2-6 (PSD Requirements), SO₂ emissions from B-6 shall be limited to less than 0.50 pounds per MMBtu and 545.31 tons per twelve (12) month consecutive period when burning No. 2 fuel oil.

D.7.5 Carbon Monoxide Emission Limitations [326 IAC 2-2-5, 2-2-6]

Pursuant to 326 IAC 2-2-5 and 2-2-6 (PSD Requirements), CO emissions from B-6 shall be limited to 0.295 lb/MMBtu and 321.73 tons per twelve (12) month consecutive period when burning No. 2 fuel oil or 0.084 lb/MMBtu and 91.61 tons per twelve (12) month consecutive period when burning natural gas.

D.7.6 New Source Performance Standards Per [40 CFR 60.40b, Subpart Db]

Pursuant to 40 CFR 60, Subpart Db, the following limitations apply:

- (a) Pursuant to 40 CFR 60.44b(a), the NOx emissions from B-6 shall not exceed 0.20lb/MMBtu.
- (b) Pursuant to 40 CFR 60.44b(f), opacity may not exceed 20%.

- (c) Only very low sulfur fuel (no greater than 0.5%) will be combusted in the unit.
- (d) Pursuant to 40 CFR 60.43b(b), particulate matter emissions shall not exceed 0.10 lb/MMBtu.

D.7.7 Nitrogen Oxide Emission Limitations [326 IAC 2-3]

When burning natural gas, the NO_x emissions rate shall not exceed 0.036 lb/MMBtu based on operation with low NO_x burners and necessary flue gas recirculation.

Overall NO_x emissions are limited to less than 40 tons per twelve (12) month consecutive period for gas and oil firing combined, as determined by the continuous emissions monitoring system (CEMS) or other means approved by the Department.

D.7.8 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

The provisions of 40 CFR Part 60 Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to B-6 except when otherwise specified in 40 CFR Part 60 Subpart Db.

D.7.9 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants for Source Categories [40 CFR 63 Subpart A]

Pursuant to 40 CFR Part 63, Subpart A, the Permittee shall comply with an applicable promulgated MACT standard in accordance with the schedule provided in the MACT. The MACT requirements include the applicable General Provisions requirements of 40 CFR Part 63, Subpart A. Pursuant to 40 CFR 63.9(b), the Permittee shall submit an initial notification not later than 120 days after the effective date of the MACT, unless the MACT specifies otherwise. The MACT and the General Provisions of 40 CFR 63, Subpart A will become new applicable requirements, as defined by 326 IAC 2-7-1(6), that must be incorporated into the Part 70 permit.

D.7.10 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD]

- (a) The 249 MMBtu/hr boiler identified as B-6 is subject to the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD].
- (b) The PM emissions shall not exceed 0.03 pounds per MMBtu of heat input, Hydrogen Chloride emissions shall not exceed 0.0005 pounds per MMBtu of heat input and CO emissions shall not exceed 400 parts per million (ppm) by volume on a dry basis corrected to 3% oxygen (30 day rolling average for units 100 MMBTU/hour or greater).
- (c) If emission limits included in this article conflict with, or are inconsistent with, any other emission limitations established in this permit, the more stringent limits shall apply.

D.7.11 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for B-6.

Compliance Determination Requirements

D.7.12 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Within 60 days of achieving maximum production rate, but no later than 180 days after initial startup, the Permittee shall perform opacity, CO, NO_x, PM and PM₁₀ tests utilizing methods approved by the Commissioner to show compliance with the applicable limits. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the emissions units are in compliance.

D.7.13 Fuel Oil Sulfur Content Limit

To demonstrate compliance with condition D.7.4 when B-6 combusts fuel oil, the sulfur content of the fuel oil combusted shall not exceed 0.5 percent by weight. Sulfur content will be demonstrated to have met this limit pursuant to 326 IAC 3-7-4. During No. 2 fuel oil fire, B-6 will combust only very low sulfur oil as defined in 40 CFR Part 60, Subpart Db.

D.7.14 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-1.1-2]

- (a) Pursuant to 326 IAC 7-2-1(c)(3), the Permittee shall demonstrate that when combusting fuel oil in B-6, the sulfur dioxide emissions do not exceed the equivalent of 0.5 pounds per MMBtu, using a calendar month average.
- (b) Pursuant to 326 IAC 7-2-1(e) and 326 IAC 3-7-4, fuel sampling and analysis data shall be collected as follows:
 - (1) The Permittee may, with the prior approval of the department, modify the procedures specified in 326 IAC 3-7-4(a), use alternate equivalent procedures, or rely upon vendor analysis of fuel delivered, if accompanied by a vendor certification [326 IAC 3-7-4(b)]; or,
 - (2) The Permittee shall perform sampling and analysis of fuel oil samples in accordance with 326 IAC 3-7-4(a).
 - (A) Oil samples shall be collected from the tanker truck load prior to transferring fuel to the storage tank; or
 - (B) Oil samples shall be collected from the storage tank immediately after each addition of fuel to the tank.
- (c) Upon written notification to IDEM by a facility owner or operator, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5 may be used as the means for determining compliance with the emission limitations in 326 IAC 7. Upon such notification, the other requirements of 326 IAC 7-2 shall not apply. [326 IAC 7-2-1(g)]

D.7.15 Continuous Emissions Monitoring [326 IAC 3-5]

- (a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), the continuous opacity monitoring system (COM) and the continuous emission monitoring system (CEM) for B-6, when combusting fuel oil or natural gas, shall be calibrated, maintained, and operated for measuring opacity and NOx emissions respectively which meet all applicable performance specifications of 326 IAC 3-5-2.
- (b) The continuous opacity monitoring system (COM) and the continuous emission monitoring system (CEM) are subject to the monitor system certification requirements pursuant to 326 IAC 3-5-3.
- (c) Except as noted in C.12 (Maintenance of Continuous Emission Monitoring Equipment) and C.13 (Monitoring Methods) regarding VE and NOx alternative monitoring, nothing in this permit shall excuse the Permittee from complying with the requirements to operate the continuous opacity monitoring system (COM) and the continuous emission monitoring system (CEM) pursuant to 326 IAC 3-5.

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

D.7.16 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

When B-6 is exhausting to stack S-9, and it is combusting fuel oil, opacity will be monitored in accordance with 40 CFR Part 60, Subpart Db.

Record Keeping and Reporting Requirements

D.7.17 Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- (a) To document compliance with the SO₂ Conditions D.7.4 and D.7.14 the Permittee shall maintain records in accordance with (1) through (6) below. Records shall be complete and sufficient to establish compliance with the SO₂ limit as required in Conditions D.7.4 and D.7.14.
- (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
 - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and
- If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:
- (4) Fuel supplier certifications;
 - (5) The name of the fuel supplier; and
 - (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.
- (b) Boiler B-6 is subject to applicable emissions limitations provided in CFR 40 Part 60, Subpart Db. Compliance will be demonstrated in accordance with Subpart Db provisions.
- (c) Boiler B-6 is subject to applicable emissions limitations provided in 40 CFR Part 60, Subpart DDDDD. Compliance will be demonstrated in accordance with Subpart DDDDD provisions.
- (d) To document compliance with D.7.6, D.7.7 and D.7.15 the Permittee shall maintain records of the results of continuous opacity monitoring (COM) and the continuous emission monitoring (CEM) systems.
- (e) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.7.18 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Conditions D.7.1, D.7.2, and D.7.4 through D.7.7 under natural gas and fuel oil firing shall be submitted to the address listed in Section C - General Reporting Requirements, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) All reports shall be submitted in accordance with Section C - General Reporting Requirements, of this permit.

SECTION D.8 FACILITY OPERATION CONDITIONS

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

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

- (a) One (1) underground diesel fuel storage tank for which a construction permit was issued in 2003 for generators G-8, G-9, and G-10, identified as UST, with maximum storage capacity of 30,000 gallons. [326 IAC 12-1] [40 CFR 60, Subpart A]
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3]
- (e) One (1) lime sorbent storage silo (Silo 1) controlled by one (1) bin vent filter (BVF-1). [326 IAC 6.5-1-2]
- (f) One (1) powdered activated carbon (PAC) sorbent storage silo (Silo 2) controlled by one (1) bin vent filter (BVF-2). [326 IAC 6.5-1-2]
- (g) One (1) fly and bottom ash storage silo (Ash Silo) controlled by one (1) bin vent filter (Ash Silo Bin Vent Filter). [326 IAC 6.5-1-2]

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.8.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, the provisions of 40 CFR 60 Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to one (1) underground diesel fuel storage tank, identified as UST, described in this section except when otherwise specified in 40 CFR 60 Subpart Kb.

D.8.2 Standards of Performance for Volatile Organic Liquid Storage Vessels [326 IAC 12] [40 CFR 60.116b]

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, the one underground diesel storage tank, identified as UST, shall comply with New Source Performance Standards (NSPS), 326 IAC 12 (40 CFR Part 60.116b, Subpart Kb). 40 CFR 60.116b, paragraphs (a) and (b) require the Permittee to maintain accessible records showing the dimensions of each storage vessel and an analysis showing the capacity of the storage vessel. Records shall be kept for the life of the storage tank.

D.8.3 Volatile Organic Compounds (VOC)

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator 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.8.4 Volatile Organic Compounds (VOC)

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility 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 or 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 shall ensure that the following operating requirements are met:

- (1) Close the cover whenever articles are not being handled in the degreaser.
- (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
- (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

D.8.5 Particulate Matter Limitation (PM) [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(g), the particulate matter emissions from the lime sorbent storage silo, powdered activated carbon (PAC) sorbent storage silo and the fly and bottom ash storage silo shall not exceed 0.03 grains per dry standard cubic foot, each.

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

D.8.6 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) Visible emission (VE) notations of the bin vent exhausts shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) If abnormal emissions are observed at the stack exhaust, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions and Exceedances. Observation of abnormal emissions that do not violate an applicable opacity limit is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation of this permit.
- (c) “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) 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 the boiler.

Record Keeping and Reporting Requirements

D.8.7 Record Keeping Requirements

- (a) To document compliance with Condition D.8.6, the Permittee shall maintain records of the once per day visible emission notations of the silo bin vent exhausts.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

SECTION E.1 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

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

- (b) Two (2) coal or natural gas fired boilers constructed in 1952, identified as B-2 and B-3, with maximum design capacities of 96 MMBtu per hour heat input each, each equipped with low NOx burners when using natural gas, and cyclones, identified as D-1 and D-2, respectively, with both cyclones to be replaced by one (1) pulse jet fabric filter baghouse, identified as PJFF-1, for particulate control, when combusting coal. In addition, the following systems are connected to the baghouse PJFF-1: one (1) lime sorbent injection system, identified as SI-1, used for Hydrogen Chloride control and one (1) powdered activated carbon injection system, identified as SI-2, used for Mercury control. The opacity is measured by a certified continuous opacity monitor identified as COM1 when combusting coal, exhausting at stack S-1.

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), the boilers B-2 and B-3, are considered existing large solid fuel affected sources.

- (c) One (1) coal, No.2 fuel oil, or natural gas fired boiler constructed in 1966, identified as B-4, with a maximum design capacity of 234 MMBtu per hour heat input, equipped with an electrostatic precipitator, identified as E-1, with the electrostatic precipitator to be replaced by one (1) pulse jet fabric filter baghouse, identified as PJFF-2, for particulate control when combusting coal. In addition, the following systems are connected to the baghouse PJFF-2: one (1) lime sorbent injection system, identified as SI-1, used for Hydrogen Chloride control and one (1) powdered activated carbon injection system, identified as SI-2, used for Mercury control. The opacity is measured by a certified continuous opacity monitor identified as COM2 when combusting coal and/or oil, exhausting at stack S-2.

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), the boiler B-4, is considered an existing large solid fuel affected source.

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

E.1.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the affected source, as designated by 40 CFR 63.7506(b), except when otherwise specified in 40 CFR Part 63 Subpart DDDDD. The Permittee must comply with these requirements one year after the effective date of 40 CFR Part 63, Subpart DDDDD.

E.1.2 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD]

- (a) The affected source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, (40 CFR Part 63, Subpart DDDDD), as of one year after the effective date of 40 CFR Part 63, Subpart DDDDD. Pursuant to this rule, the Permittee must comply with 40 CFR Part 63, Subpart DDDDD on and after September 13, 2007, three years after the date of publication of the final rule for 40 CFR Part 63, Subpart DDDDD in the Federal Register. The University of Notre Dame du Lac has been granted a one (1) year extension to the compliance date of September 13, 2007 by IDEM, OAQ, Compliance Branch.

- (b) The following emissions units comprise the affected source for the large solid fuel

subcategory:

- (i) The two (2) coal or natural gas fired boilers constructed in 1952, identified as B-2 and B-3, with maximum design capacities of 96 MMBtu per hour heat input each; and
- (ii) One (1) coal, No.2 fuel oil, or natural gas fired boiler constructed in 1966, identified as B-4, with a maximum design capacity of 234 MMBtu per hour heat input.

E.1.3 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD] [326 IAC 20-95]

Pursuant to CFR Part 63, Subpart DDDDD, the Permittee shall comply with the provisions of National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, which are incorporated by reference as 326 IAC 20-95, for Boilers B-2, B-3 and B-4, as specified as follows:

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.

(d) A boiler or process heater is existing if it is not new or reconstructed.

§ 63.7495 When do I have to comply with this subpart?

(b) If you have an existing boiler or process heater, you must comply with this subpart no later than September 13, 2007.

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]

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.

[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.

(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) Thoroughly 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.

$$\text{Ave Weighted Emissions} = \sum_{i=1}^n (E_i \times H_i) + \sum_{i=1}^n H_i \quad (\text{Eq. 1})$$

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.

$$\text{Ave Weighted Emissions} = \frac{\sum_{i=1}^n (Er \times Sm \times Cf)}{\sum_{i=1}^n Sm \times Cf} \quad (\text{Eq. 2})$$

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.

$$\text{Ave Weighted Emissions} = \frac{\sum_{i=1}^n (Er \times Hb)}{\sum_{i=1}^n Hb} \quad (\text{Eq. 3})$$

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.

$$\text{Ave Weighted Emissions} = \frac{\sum_{i=1}^n (Er \times Sa \times Cf)}{\sum_{i=1}^n Sa \times Cf} \quad (\text{Eq. 4})$$

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.

$$E_{avg} = \frac{\sum_{i=1}^n ER_i}{12} \quad (\text{Eq. 4A})$$

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.

[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?

(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.

(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.

(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.

$$Cl_{input} = \sum_{i=1}^n [(C_i)(Q_i)] \quad (Eq. 5)$$

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.

$$TSM_{input} = \sum_{i=1}^n [(M_i)(Q_i)] \quad (Eq. 6)$$

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.

$$Mercury_{input} = \sum_{i=1}^n [(HG_i)(Q_i)] \quad (Eq. 7)$$

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.

(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.

$$P_{90} = \text{mean} + (\text{SD} \times t) \quad (\text{Eq. 8})$$

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 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.

$$HCl = \sum_{i=1}^n [(C_{i90})(Q_i)(1.028)] \quad (\text{Eq. 9})$$

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.

$$TSM = \sum_{i=1}^n [(M_{i90})(Q_i)] \quad (Eq. 10)$$

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.

$$Mercury = \sum_{i=1}^n [(HG_{i90})(Q_i)] \quad (Eq. 11)$$

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).

(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.

(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;

(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.

(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.

(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.

§ 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 Rank¹” (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 of 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]

Tables to Subpart DDDDD of Part 63

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 sub-category...	For the following pollutants...	You must meet the following emission limits and work practice standards...
9. Existing large solid fuel	a. Particulate Matter (or Total Selected Metals) b. Hydrogen Chloride c. Mercury	0.07 lb per MMBtu of heat input; or (0.001 lb per MMBtu of heat input). 0.09 lb per MMBtu of heat input. 0.000009 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
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 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).
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
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
	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).
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.
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...
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	<ul style="list-style-type: none"> a. Select sampling ports location and the number of traverse points. b. Determine velocity and volumetric flow- rate of the stack gas. c. Determine oxygen and carbon dioxide concentrations of the stack gas d. Measure the moisture content of the stack gas e. Measure the particulate matter emission concentration. f. Convert emissions concentrations to lb per MMBtu emission rates 	<p>Method 1 in appendix A to part 60 of this chapter.</p> <p>Method 2, 2F, or 2G in appendix A to part 60 of this chapter.</p> <p>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)).</p> <p>Method 4 in appendix A to part 6 this chapter.</p> <p>Method 5 or 17 (positive pressure fabric filters must use Method 5D) in appendix A to part 60 of this chapter.</p> <p>Method 19 F-factor methodology in appendix A to part 60 of this chapter.</p>
2. Total selected metals	<ul style="list-style-type: none"> a. Select sampling ports location and the number of traverse points. b. Determine velocity and volumetric flow rate of the stack. c. Determine oxygen and carbon dioxide concentrations of the stack gas d. Measure the moisture content of the stack gas. e. Measure the total selected metals emission concentrations. f. Convert emissions concentration to lb per MMBtu emission rates 	<p>Method 1 in appendix A to part 60 of this chapter.</p> <p>Method 2, 2F, or 2G in appendix A to part 60 of this chapter.</p> <p>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)).</p> <p>Method 4 in appendix A to part 60 of this chapter.</p> <p>Method 29 in appendix A to part 60 of this chapter.</p> <p>Method 19 F-factor methodology in appendix A to part 60 of this chapter.</p>
3. Hydrogen chloride	<ul style="list-style-type: none"> a. Select sampling ports location and the number of traverse points. b. Determine velocity and volumetric flow rate of the stack gas. c. Determine oxygen and carbon dioxide concentrations of the stack gas. d. Measure the moisture content of the stack gas. e. Measure the hydrogen chloride emission concentration. f. Convert emissions concentration to lb per MMBtu emission rates. 	<p>Method 1 in appendix A to part 60 of this chapter.</p> <p>Method 2, 2f, or 2G in appendix A to part 60 of this chapter.</p> <p>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)).</p> <p>Method 4 in appendix A to part 60 of this chapter.</p> <p>Method 26 or 26A in appendix A to part 60 of this chapter.</p> <p>Method 19 F-factor methodology in appendix A to part 60 of this chapter.</p>

4. Mercury	<ul style="list-style-type: none"> a. Select sampling ports location and the number of traverse points. b. Determine velocity and volumetric flow rate of the stack gas. c. Determine oxygen and carbon dioxide concentrations of the stack gas. d. Measure the moisture content of the stack gas. e. Measure the mercury emission concentration. f. Convert emissions concentration to lb per MMBtu emission rates. 	<p>Method 1 in appendix A to part 60 of this chapter.</p> <p>Method 2, 2F, or 2G in appendix A to part 60 of this chapter.</p> <p>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)).</p> <p>Method 4 in appendix A to part 60 of this chapter.</p> <p>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)).</p> <p>Method 19 F-factor methodology in appendix A to part 60 of this chapter.</p>
5. Carbon Monoxide	<ul style="list-style-type: none"> a. Select the sampling ports location and the number of traverse points. b. Determine oxygen and carbon dioxide concentrations of the stack gas. c. Measure the moisture content of the stack gas. d. Measure the carbon monoxide emission concentration. 	<p>Method 1 in appendix A to part 60 of this chapter.</p> <p>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)).</p> <p>Method 4 in appendix A to part 60 of this chapter.</p> <p>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.</p>

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	<ul style="list-style-type: none"> a. Collect fuel samples b. Composite fuel samples c. Prepare composited fuel samples d. Determine heat content of the fuel type e. Determine moisture content of the fuel type 	<p>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.</p> <p>Procedure in § 63.7521(d) or equivalent.</p> <p>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.</p> <p>ASTM D5865-04 (for coal) (IBR, see § 63.24(b)) or ASTM E711-87 (for biomass) (IBR, see § 63.14(b)) or equivalent.</p> <p>ASTM D3173-03 (IBR, see moisture content § 63.14(b)) or ASTM of the fuel type E871-82 (1998) (IBR, see §</p>

	<p>f. Measure mercury concentration in fuel sample</p> <p>g. Convert concentration into units of pounds of pollutant per MMBtu of heat content.</p>	<p>63.14(b)) or equivalent. ASTM D6722-01 (for coal) (IBR, see § 63.14(b)) or SW-846-7471A (for solid .solid samples) or SW-846-7470A (for liquid samples or equivalent.</p>
<p>2. Total Selected metals</p>	<p>a. Collect fuel samples</p> <p>b. Composite fuel samples</p> <p>c. Prepare composited fuel samples</p> <p>d. Determine heat content of the fuel type</p> <p>e. Determine moisture content</p> <p>f. Measure total selected metals concentration in fuel sample</p> <p>g. Convert concentrations into units of pounds of pollutant per MMBtu of heat content</p>	<p>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. Procedure in § 63.7521(d) or equivalent. 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. ASTM D5865-04 (for coal) (IBR, see § 63.14(b)) or ASTM E711-87 (for biomass) (IBR, see § 63.14(b)) or equivalent. ASTM D3173-03 (IBR, see § 63.14(b)) or ASTM E871-82 (IBR, see § 63.14(b)) or equivalent. SW-846-6010B or ASTM selected metals D6357-04 (for arsenic, concentration in 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.</p>
<p>3. Hydrogen Chloride</p>	<p>a. Collect fuel samples</p> <p>b. Composite fuel samples</p> <p>c. Prepare composited fuel samples</p> <p>d. Determine heat content of the fuel type</p> <p>e. Determine moisture content of the fuel type</p> <p>f. Measure chlorine</p>	<p>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. Procedure in §63.7521(d) or equivalent. 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. ASTM D5865-04 (for coal) (IBR, see § 63.14(b)) or ASTM E711-87 (1996) (for biomass) (IBR, see § 63.14(b)) or equivalent. ASTM D3173-03 (IBR, see § 63.14(b)) or ASTM E871-82(1998) or equivalent. SW-846-9250 or ASTM D6721-01</p>

g. Convert concentrations into units of pounds of pollutant per MMBtu of heat content	concentration in fuel sample (for coal) or ASTM E776-87 (1996) (for biomass) (IBR, see § 63.14(b)) or equivalent.
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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
2. Hydrogen Chloride	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; (b) Determine the average sorbent injection rate for each individual test run in the three run performance test by computing 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.
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 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).

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)	This report must contain...	You must submit the report...
1. Compliance report	a. Information required in § 63.7550(c)(1) through (11); 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 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 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)	Semiannually according to the requirements in § 63.7550(b).
2. An immediate startup, shutdown, and malfunction report if you had a startup, shutdown, or malfunction during the reporting inconsistent with period that is not the plan; and consistent with your startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant	a. Actions taken for the event, and	i. By fax or telephone with 2 working days after starting actions inconsistent with the plan, and

emission standard.	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.
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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
§ 63.3	Units and Abbreviations	Units and abbreviations for part 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 Become Major	Area sources that become major must comply with major source standards by That date indicated in subpart or by 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	Yes

		times except during SSM.	
§ 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 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(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	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
§ 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	Yes

		compliance.	
§ 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 to demonstrate compliance.	Yes
§ 63.7(a)(2)(ii-viii)	[Reserved]		
§ 63.7(a)(2)(ix)	Performance Test Dates	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 80 days before the test.	No
§ 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 test 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
§ 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 CMs	Yes
§ 63.8(c)(1)(iii)	Compliance with Operation and Maintenance Requirements	Must develop and implement 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	CMS 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
§ 63.8(c)(5)	Continuous Opacity Monitoring system (COMS) Requirements	Must do daily zero and high level calibrations	Yes
§ 63.8(c)(6)	Continuous Opacity Monitoring system (COMS) 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 computing in 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

§ 63.9(g)	Additional Notifications When Using Continuous Monitoring Systems	Notification of performance evaluation and notification using continuous opacity monitoring system data; and notification 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.	Yes
§ 63.10(b)(2)(xiv)	Records	All documentation supporting Initial Notification and Notification of Compliance Statue	Yes
§ 63.10(b)(3)	Records	Applicability Determinations	Yes
§ 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 Progress Reports	What to report and when	Yes
§ 63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance	Yes

		extension.	
§ 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 exceedence (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 exceedence (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 exceedence 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 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).	Yes
§ 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

E.1.4 Deadlines Relating to Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD]

The Permittee shall comply with the following notifications requirements by the dates listed:

Requirement	Rule Cite	Affected Facility	Deadline
Initial Notification	40 CFR 63.7545(b)	B-2, B-3 and B-4	March 12, 2005
Notification	40 CFR 63.7495(b) 40 CFR 63.9(b)	B-2, B-3 and B-4	Submit notification of startup
Compliance Date	40 CFR 63.7495(b)	B-2, B-3 and B-4	1 year after September 13, 2007
Conduct Performance	40 CFR 63.7510(d)	B-2, B-3 and B-4	3 years + 180 days from

Test			initial notification
Notification of Compliance Status	40 CFR 63.7545(e)	B-2, B-3 and B-4	3 years + 240 days from initial notification
Compliance Report (semiannual)	40 CFR 63.7550(b)	B-2, B-3 and B-4	Initial report by July 31, 2008 and ongoing from then.
Site-specific fuel analysis plan	40 CFR 63.7521(b)(1)	B-2, B-3 and B-4	At least 60 days before the date the source demonstrates compliance
Implementation plan for emissions averaging	40 CFR 63.7522(g)(1)	B-2, B-3 and B-4	At least 180 days before the date the source demonstrates compliance
Notification of Intent to conduct a Performance Test and Submit a QA/Test plan	40 CFR 63.7545(d)	B-2, B-3 and B-4	At least 30 days before the date the performance test is scheduled to begin
Notification of Intent to conduct a visible emissions/opacity test	40 CFR 63.7545(a)	B-2, B-3 and B-4	At least 30 days before the visible emissions/opacity test is scheduled to begin
Notification of Compliance Status	40 CFR 63.7545(e)	B-2, B-3 and B-4	Within 60 days after completing the initial performance test or compliance demonstration

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: University of Notre Dame du Lac
Source Address: 100 Facilities Building, Notre Dame, Indiana 46556
Mailing Address: 100 Facilities Building, Notre Dame, Indiana, 46556
Part 70 Permit No.: T141-7412-00013

**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 BRANCH
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865**

**PART 70 OPERATING PERMIT
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: University of Notre Dame du Lac
Source Address: 100 Facilities Building, Notre Dame, Indiana 46556
Mailing Address: 100 Facilities Building, Notre Dame, Indiana, 46556
Part 70 Permit No.: T141-7412-00013

This form consists of 2 pages

Page 1 of 2

<input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none">C The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); andC The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.
--

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:

Title / Position:

Date:

Phone:

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: University of Notre Dame du Lac
Source Address: 100 Facilities Building, Notre Dame, Indiana 46556
Mailing Address: 100 Facilities Building, Notre Dame, Indiana, 46556
Part 70 Permit No.: T141-7412-00013

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.		
Report Period:		
Beginning:		
Ending:		
<u>Boiler Affected</u>	<u>Alternate Fuel</u>	<u>Days burning alternate fuel</u>
		From To

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Phone:
Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: University of Notre Dame du Lac
Source Address: 100 Facilities Building, Notre Dame, Indiana 46556
Mailing Address: 100 Facilities Building, Notre Dame, Indiana, 46556
Part 70 Permit No.: T141-7412-00013

Months: _____ to _____ Year: _____

Page 1 of 2

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By:

Title/Position:

Date:

Phone:

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: University of Notre Dame du Lac
 Source Address: 100 Facilities Building, Notre Dame, Indiana 46556
 Mailing Address: 100 Facilities Building, Notre Dame, Indiana, 46556
 Part 70 Permit No.: T141-7412-00013
 Facility: Boilers (B-2, B-3, and B-4)
 Parameter: SO2 emissions, coal analysis (B-2, B-3, B-4), coal usage (B-2, B-3, B-4)
 Limit: SO2 emissions from each boiler shall not exceed 6.0 pounds per million Btu when using coal.

QUARTER:

YEAR:

Month	(A)	(B)	[2 X (A) X 2000] / [(B)
	Monthly Average Coal Sulfur Content* (%)	Monthly Average Coal Heat Content* (MMBtu/lb)	Equivalent Sulfur Dioxide Emissions (lb/MMBtu)
Month 1			
Month 2			
Month 3			

* Calculate the weighted sulfur and heat content for coal based on weighted average of daily coal usage

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
 Deviation has been reported on:

Submitted by:
 Title / Position:
 Signature:
 Date:
 Phone:

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: University of Notre Dame du Lac
 Source Address: 100 Facilities Building, Notre Dame, Indiana 46556
 Mailing Address: 100 Facilities Building, Notre Dame, Indiana, 46556
 Part 70 Permit No.: T141-7412-00013
 Facility: (B-1, B-4, B-5, and B-6)
 Parameter: SO₂ emissions, sulfur content (B-1, B-4, B-5, and B-6), fuel oil usage (B-1, B-4, B-5, and B-6)
 Limit: SO₂ emissions from boiler B-1 (Residual or No.6 fuel oil) shall not exceed 1.6 lb/MMBtu;
 SO₂ emissions from boiler B-4, B-5, B-6 (Distillate or No.2 fuel oil) shall not exceed 0.5 lb/MMBtu

QUARTER:

YEAR:

Month	Monthly Average Fuel Oil Sulfur Content* (%)		Monthly Average Fuel Oil Heat Content* (MMBtu/gallon)		Fuel Oil Consumption (Total Gallons)		Equivalent Sulfur Dioxide Emissions (lb/MMBtu)	
	B-1	B-4, B-5, B-6	B-1	B-4, B-5, B-6	B-1	B-4, B-5, B-6	B-1	B-4, B-5, B-6
Month 1								
Month 2								
Month 3								

* Calculate the weighted sulfur and heat content for coal based on weighted average of daily coal usage

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
 Deviation has been reported on:

Submitted by:
 Title / Position:
 Signature:
 Date:
 Phone:

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: University of Notre Dame du Lac
Source Address: 100 Facilities Building, Notre Dame, Indiana 46556
Mailing Address: 100 Facilities Building, Notre Dame, Indiana, 46556
Part 70 Permit No.: T141-7412-00013
Facility: Diesel fired generators, G-3, G-4, G-8, G-9, and G-10
Parameter: Sulfur Dioxide (SO2)
Limit: 0.5 pounds per million Btu heat input

QUARTER:

YEAR:

Month	Monthly Average Fuel Oil Sulfur Content (%)	Monthly Average Fuel Oil Heat Content (MMBtu/gallon)	Fuel Oil Consumption (Total Gallons)	Equivalent Sulfur Dioxide Emissions (lbs/MMBtu)
Month 1				
Month 2				
Month 3				

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by:
Title / Position:
Signature:
Date:
Phone:

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: University of Notre Dame du Lac
Source Address: 100 Facilities Building, Notre Dame, IN 46556
Mailing Address: 100 Facilities Building, Notre Dame, IN 46556
Part 70 Permit No.: T141-7412-00013
Facility: G-8, G-9 and G-10
Parameter: Total Combined Fuel Usage (gallons per 12 consecutive month period.)
Limit: 3,076,600 gallons of diesel per 12 consecutive month period, with compliance determined at the end of each month.

QUARTER:

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by:
Title / Position:
Signature:
Date:
Phone:

Attach a signed certification to complete this report.

**Indiana Department of Environmental Management
Office of Air Quality**

**Technical Support Document (TSD) for a Part 70 Minor Source
Modification**

Source Description and Location

Source Name:	University of Notre Dame du Lac
Source Location:	100 Facilities Building, Notre Dame, IN 46556
County:	St. Joseph
SIC Code:	8221
Operation Permit No.:	T 141-7412-00013
Operation Permit Issuance Date:	June 30, 2004
Minor Source Modification No.:	T141-24306-00013
Permit Reviewer:	James Farrell

Existing Approvals

The source was issued Part 70 Operating Permit No. T141-7412-00013 on June 30, 2004. The source has since received the following approvals:

- (a) Significant Source Modification No. T141-20012-00013, issued on August 24, 2005;
- (b) Significant Permit Modification No. T141-20402-00013, issued on September 6, 2005;
- (c) Minor Permit Modification No. T141-21977-00013, issued on February 21, 2006; and
- (d) Significant Permit Modification No. T141-22724-00013, issued on September 29, 2006.

County Attainment Status

The source is located in St. Joseph County.

Pollutant	Status
PM ₁₀	Attainment
PM _{2.5}	Attainment
SO ₂	Attainment
NO ₂	Attainment
8-hour Ozone	Nonattainment
CO	Attainment
Lead	Attainment

- (a) 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 the ozone standards. St. Joseph County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

- (b) St. Joseph County has been classified as attainment for PM_{2.5}. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM_{2.5} emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions.
- (c) St. Joseph County has been classified as attainment or unclassifiable for the remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.
- (e) On October 25, 2006, a final rule took effect revoking the one-hour ozone standard in Indiana.

Source Status

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	Emissions (ton/yr)
PM	> 100
PM ₁₀	> 100
SO ₂	> 250
VOC	< 100
CO	> 100
NO _x	> 250

- (a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because an attainment regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1)(V).
- (b) This existing source is a major stationary source, under Emission Offset (326 IAC 2-3), because NO_x, a nonattainment regulated pollutant, is emitted at a rate of 100 tons per year or more.
- (c) These emissions are based upon the Title V Permit issued on June 30, 2004.

The table below summarizes the potential to emit HAPs for the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

HAPs	Potential To Emit (ton/yr)
Single	> 10
Combination	> 25

This existing source is a major source of HAPs, as defined in 40 CFR Part 63.41, because HAP emissions are greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2005 OAQ emission data.

Pollutant	Actual Emissions (ton/yr)
PM ₁₀	25
SO ₂	4,178
VOC	4
CO	69
NO _x	652
Total HAPs	not reported

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a significant permit application, submitted by the University of Notre Dame du Lac on February 9, 2007, relating to the addition of control equipment to the two (2) coal or natural gas fired boilers constructed in 1952, identified as B-2 and B-3 and the one (1) coal, No.2 fuel oil, or natural gas fired boiler constructed in 1966, identified as B-4, to comply with the applicable requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, (40 CFR Part 63, Subpart DDDDD). The modification includes the addition of:

- (a) one (1) Lime Sorbent Injection System;
- (b) one (1) Powdered Activated Carbon Injection System; and
- (c) replacement of the existing cyclones, identified as D-1 and D-2, for boilers B-2 and B-3 and replacement of the existing electrostatic precipitator, identified as E-1, for boiler B-4, with two (2) Pulse Jet Fabric Filter, identified as PJFF-1 and PJFF-2, respectively.

40 CFR Part 63, Subpart DDDDD has a compliance date of September 13, 2007. A one (1) year extension of the NESHAP compliance date was granted to Notre Dame by the OAQ Compliance Branch on March 9, 2006.

The following is a list of the proposed emission units and pollution control devices:

- (a) Two (2) coal or natural gas fired boilers constructed in 1952, identified as B-2 and B-3, with maximum design capacities of 96 MMBtu per hour heat input each, each equipped with low NO_x burners when using natural gas, and cyclones, identified as D-1 and D-2, respectively, with both cyclones to be replaced by one (1) pulse jet fabric filter baghouse, identified as PJFF-1, for particulate control, when combusting coal. In addition, the following systems are connected to the baghouse PJFF-1: one (1) lime sorbent injection system, identified as SI-1, used for Hydrogen Chloride control and one (1) powdered activated carbon injection system, identified as SI-2, used for Mercury control. The opacity is measured by a certified continuous opacity monitor identified as COM1 when combusting coal, exhausting at stack S-1.

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), the boilers B-2 and B-3, are considered existing large solid fuel affected sources.

- (b) One (1) coal, No.2 fuel oil, or natural gas fired boiler constructed in 1966, identified as B-4, with a maximum design capacity of 234 MMBtu per hour heat input, equipped with an electrostatic precipitator, identified as E-1, with the electrostatic precipitator to be replaced by one (1) pulse jet fabric filter baghouse, identified as PJFF-2, for particulate control when combusting coal. In addition, the following systems are connected to the baghouse PJFF-2: one (1) lime sorbent injection system, identified as SI-1, used for Hydrogen Chloride control and one (1) powdered activated carbon injection system, identified as SI-2, used for Mercury control. The opacity is measured by a certified continuous opacity monitor identified as COM2 when combusting coal and/or oil, exhausting at stack S-2.

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), the boiler B-4, is considered an existing large solid fuel affected source.

- (c) One (1) lime sorbent storage silo (Silo 1) controlled by one (1) bin vent filter (BVF-1).
- (d) One (1) powdered activated carbon (PAC) sorbent storage silo (Silo 2) controlled by one (1) bin vent filter (BVF-2).
- (e) One (1) fly and bottom ash storage silo (Ash Silo) controlled by one (1) bin vent filter (Ash Silo Bin Vent Filter).

Enforcement Issues

There are no pending enforcement actions related to this modification.

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

Only the Potential to Emit of the storage silos were considered because they are the new emission units.

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.

Pollutant	Potential To Emit (ton/yr)
PM	6.60
PM ₁₀	6.60
SO ₂	0
VOC	0
CO	0
NO _x	0

This source modification is subject to 326 IAC 2-7-10.5(d)(3), for modifications that have the potential to emit less than twenty-five (25) tons per year and equal to or greater than five (5) tons per year of either particulate matter (PM) or particulate matter less than ten (10) microns (PM₁₀). Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(1), because the incorporation of national emission standards for hazardous air pollutants (NESHAP), a modification under provisions of Title I of the Clean Air Act, do not qualify as minor permit modifications.

Permit Level Determination – PSD or Emission Offset

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 permit modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process / Emission Unit	PM	PM ₁₀	SO ₂	VOC	CO	NO _x
Silo 1	1.32	1.32	-	-	-	-
Silo 2	0.02	0.02	-	-	-	-
Ash Silo	5.26	5.26	-	-	-	-
Total for Modification	6.60	6.60	-	-	-	-
Major Source Threshold	25	15	40	40	100	40

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD and Emission Offset significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements and 326 IAC 2-3, the Emission Offset requirements do not apply to this modification.

Federal Rule Applicability Determination

The following federal rules are applicable to the source due to this modification:

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) This source is subject to the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD), which is incorporated by reference as 326 IAC 20-1-1. The units subject to this rule include the following:
 - 1. One (1) No.6 fuel oil or natural gas fired boiler constructed in 1961, identified as B-1, with a single low NOx burner and Economizer installed in 2006, and with a maximum design capacity of 137 MMBtu per hour heat input, exhausting to stack S-1;
 - 2. Two (2) coal or natural gas fired boilers constructed in 1952, identified as B-2 and B-3, with maximum design capacities of 96 MMBtu per hour heat input each, each equipped with low NOx burners when using natural gas, and cyclones, identified as D-1 and D-2, respectively, with both cyclones to be replaced by one (1) pulse jet fabric filter baghouse, identified as PJFF-1, for particulate control, when combusting coal. In addition, the following systems are connected to the baghouse PJFF-1: one (1) lime sorbent injection system, identified as SI-1, used for Hydrogen Chloride control and one (1) powdered activated carbon injection system, identified as SI-2, used for Mercury control. The opacity is measured by a certified continuous opacity monitor identified as COM1 when combusting coal, exhausting at stack S-1.

3. One (1) coal, No.2 fuel oil, or natural gas fired boiler constructed in 1966, identified as B-4, with a maximum design capacity of 234 MMBtu per hour heat input, equipped with an electrostatic precipitator, identified as E-1, with the electrostatic precipitator to be replaced by one (1) pulse jet fabric filter baghouse, identified as PJFF-2, for particulate control when combusting coal. In addition, the following systems are connected to the baghouse PJFF-2: one (1) lime sorbent injection system, identified as SI-1, used for Hydrogen Chloride control and one (1) powdered activated carbon injection system, identified as SI-2, used for Mercury control. The opacity is measured by a certified continuous opacity monitor identified as COM2 when combusting coal and/or oil, exhausting at stack S-2.
4. One (1) No.2 fuel oil or natural gas boiler constructed in 1973, identified as B-5, with a maximum design capacity of 244.5 MMBtu per hour heat input, equipped with low NOx burners for natural gas and fuel oil, exhausting at stack S-3;
5. One (1) 249 MMBtu/hr boiler identified as B-6, equipped with a low NOx burner and flue gas recirculation (FGR), fired primarily on natural gas with No. 2 fuel oil used as backup fuel. The unit will exhaust through stack S-9 and will be monitored by a certified COM and NOx CEM.

Boilers B-1 and B-5 are subject to the notification-only requirements of the NESHAP. Boiler B-6 is a new large liquid fuel affected source subject to the NESHAP.

For Boilers B-2, B-3 and B-4, the nonapplicable portions of the NESHAP will not be included in the permit. These emission units are subject to the following portions of Subpart DDDDD:

Pursuant to 40 CFR Part 63.7495, the Permittee shall comply with the requirements of 40 CFR Part 63, Subpart DDDDD by September 13, 2007. A one (1) year extension of this NESHAP compliance date was granted to Boilers B-2, B-3 and B-4 by the Office of Air Quality on March 9, 2006.

Pursuant to 40 CFR Part 63.7500, the Permittee has chosen to comply with the requirements of 40 CFR Part 63, Subpart DDDDD by:

- (a) Meeting the existing large solid fuel emission limits for each operation.
 - (1) 40 CFR 63.7480
 - (2) 40 CFR 63.7485
 - (3) 40 CFR 63.7490(a)(1) & (d)
 - (4) 40 CFR 63.7495(b)
 - (5) 40 CFR 63.7499
 - (6) 40 CFR 63.7500(a) & (b)
 - (7) 40 CFR 63.7505(a) through (e)
 - (8) 40 CFR 63.7510(a) through (d)
 - (9) 40 CFR 63.7515(a) through (g)
 - (10) 40 CFR 63.7520(a), (b), (d) & (e) through (g)
 - (11) 40 CFR 63.7521(a) through (e)
 - (12) 40 CFR 63.7522(a) through (g)
 - (13) 40 CFR 63.7525(b), (f), (h) & (i)
 - (14) 40 CFR 63.7530(a), (c), (d) & (e)
 - (15) 40 CFR 63.7535(a) through (c)
 - (16) 40 CFR 63.7540(a) through (d)
 - (17) 40 CFR 63.7541(a) & (b)
 - (18) 40 CFR 63.7545(a), (b), (d) & (e)
 - (19) 40 CFR 63.7550(a), (b), (c), (e) & (f)

- (20) 40 CFR 63.7555(a) through (e)
- (21) 40 CFR 63.7560(a) through (c)
- (22) 40 CFR 63.7565
- (23) 40 CFR 63.7570(a) & (b)
- (24) 40 CFR 63.7575

The provisions of 40 CFR Part 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 Part 63 Subpart DDDDD.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

326 IAC 2-2 and 2-3 (PSD and Emission Offset)

PSD and Emission Offset applicability is discussed under the Permit Level Determination – PSD and Emission Offset section.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

Pursuant to 326 IAC 2-4.1-1(b)(2), the requirements of 326 IAC 2-4.1-1 do not apply to a major source specifically regulated, or exempt from regulation, by a standard issued pursuant to Section 112(d), 112(h), or 112(j) of the CAA.

This source is subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD], on and after September 13, 2007. A one (1) year extension of this NESHAP compliance date was granted to Boilers B-2, B-3 and B-4 by the Office of Air Quality on March 9, 2006. Therefore, existing equipment at the source is exempt from the requirements of 326 IAC 2-4.1-1 on and after September 13, 2007.

326 IAC 2-6 (Emission Reporting)

Since this source is required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, this source is subject to 326 IAC 2-6 (Emission Reporting). In accordance with the compliance schedule in 326 IAC 2-6-3, an emission statement must be submitted annually. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in the permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) 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.

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 6.5-1-2 (Particulate Emissions Limitations for sources located in St. Joseph County)

Pursuant to 326 IAC 6.5-1-2(g), the storage silos shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).

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.

New compliance determination and monitoring requirements are applicable due to the addition of the storage silos and per 40 CFR Part 63, Subpart DDDDD. They are being added to Sections D.2, D.3, D.8 and E.1 of the permit as shown in the Proposed Changes section below.

The Compliance Determination Requirements applicable to this modification are as follows:

Compliance Determination and Compliance Monitoring Requirements

(a) Testing Requirements

- (i) Within 180 days upon initial operation of the pulse jet fabric filter baghouse, identified as PJFF-1, compliance with the PM limitations in Condition D.2.1 shall be determined by a performance stack test conducted while B-2 and B-3 are combusting coal utilizing methods as approved by the Commissioner.
- (ii) Within 180 days upon initial operation of the pulse jet fabric filter baghouse, identified as PJFF-2, compliance with the PM limitations in Condition D.3.1 shall be determined by a performance stack test conducted, while B-4 combusts coal, utilizing methods as approved by the Commissioner.

(b) Emission Control

The pulse jet fabric filter baghouses, identified as PJFF-1, for boilers B-2 and B-3, and PJFF-2, for boiler B-4 for hydrogen chloride, mercury and particulate emissions control shall be in operation and control emissions for the boilers at all times they are in operation and combusting coal.

(c) Bag Leak Detection Systems (BLDS)

The Permittee shall use bag leak detection systems to monitor the operation of the following baghouses:

- (1) Pulse jet fabric filter baghouse, identified as PJFF-1, for boilers B-2 and B-3, and
- (2) Pulse jet fabric filter baghouse, identified as PJFF-2, for boiler B-4.

(d) Record Keeping Requirements

The Permittee shall maintain records of the dates and times of all bag leak detection system alarms, the cause of each alarm, and an explanation of all corrective actions taken for the bag leak detection systems of pulse jet fabric filter baghouses PJFF-1 and PJFF-2.

These monitoring conditions are necessary because the baghouses must operate properly to ensure compliance with 326 IAC 6.5-7 (Particulate Matter Limitations Except Lake County) and 326 IAC 2-7 (Part 70)) prior to being subject to the compliance date requirements of the NESHAP 40 CFR Part 63, Subpart DDDDD.

Each of the NESHAP Requirements applicable to the Boilers B-2, B-3 and B-4 are listed under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD).

These monitoring conditions are necessary for Boilers B-2, B-3 and B-4 to be in compliance with 40 CFR Part 63, Subpart DDDDD.

Compliance Monitoring Requirements

The compliance monitoring requirements applicable to Silo 1, Silo 2 and the Ash Silo are as follows:

- (a) **Visible Emissions Notations**
The Permittee shall perform daily visible emission notations of the:
 - (1) Silo 1 Bin Vent Filter, BVF-1, exhaust
 - (2) Silo 2 Bin Vent Filter, BVF-2, exhaust, and
 - (3) Ash Silo, Ash Silo Bin Vent Filter.
- (b) **Record Keeping Requirements**
The Permittee shall record the visible emissions of the storage silos bin vents filters, BVF-1, BVF-2 and Ash Silo Bin Vent Filter, at least once per day during normal daylight operations.

These monitoring conditions are necessary because the silo bin vents must operate properly to ensure compliance with 326 IAC 6.5-1-2(g) (Particulate Matter Limitations Except Lake County) and 326 IAC 2-7 (Part 70)).

Proposed Changes

In addition to the changes due to the addition of the storage silos at this location, IDEM, OAQ has made the following permit changes.

- (a) **Responsible Official (RO) / Authorized Individual Section A changes**
To minimize future amendments to the issued Part 70 Permits, the OAQ decided to delete the name and/or title of the Responsible Official (RO) in Section A.1, General Information, of the permit. However, OAQ will still be evaluating if a change in RO meets the criteria specified in 326 IAC 2-7-1(34).
- (b) **Section C – Incineration**
The last sentence of original Condition C.4 – Incineration, was deleted because the provisions of 326 IAC 9-1-2 are federally enforceable and are included in Indiana’s State Implementation Plan (SIP).
- (c) **Section C – Maintenance of Continuous Emission Monitoring Equipment – COM Downtime**
This condition is being revised to include the 40 CFR 60 and 40 CFR Part 63 citations.

- (d) **Section C – General Record Keeping Requirements and General Reporting Requirements**
The clean unit and pollution control project provisions of the U.S. EPA's New Source Review Reform Rules were vacated on June 24, 2005 by a United States Court of Appeals for the District of Columbia Circuit decision. This decision also remanded the "reasonable possibility" standard back to U.S. EPA. The OAQ plans to remove the vacated provisions from 326 IAC 2 at the next state rulemaking opportunity. Revisions have been made to the Section C – General Recordkeeping and Section C – General Reporting Requirements to reflect NSR (New Source Review) reform provisions at the major sources.
- (e) **Section C – MACT Standards**
The MACT Standards language relating to 40 CFR Part 63 Subpart DDDDD is being removed from Section C because the required provisions are being incorporated into the operating permit.
- (f) **Section D – PMP Required Routine Control Device Inspections**
IDEM has determined that it is the Permittee's responsibility to include routine control device inspection requirements in the applicable preventive maintenance plan. Since the Permittee is in the best position to determine the appropriate frequency of control device inspections and the details regarding which components of the control device should be inspected, the conditions requiring control device inspections have previously been removed from the permit. The requirement to keep records of the inspections has been removed.
- (g) **Section D – Frequency of Control Device Parametric Monitoring – Once per day Visible Emissions and Monitoring of Control Device**
Upon further review, IDEM has determined that once per day visible emission notations and once per day monitoring of the control device is generally sufficient to ensure proper operation of the emission units and control devices. The monitoring frequency had been changed from once per shift to once per day in the second significant permit modification T141-22724-00013. The record keeping conditions of Section D.1 and D.4 are being revised to include these updates.
- (h) **Section D – Operation Standards and Cleaning Waste Characterization**
Upon further review, IDEM has determined that these conditions do not need to be included in the permit because they are each regulated by other agencies.
- (i) **Section D – Bag Leak Detection System (BLDS) Responses**
For the BLDS, the permit will not specify what actions the Permittee needs to take in response to a broken bag. Therefore, a requirement has been added to the BLDS requiring the Permittee to notify IDEM if a broken bag is detected and the control device will not be repaired for more than ten (10) days. This notification allows IDEM to take any appropriate actions if the emission unit will continue to operate for a long period of time while the control device is not operating in optimum condition.
- (j) **Section D.5**
Conditions D.5.5 and D.5.6 are being revised to incorporate the Agreed Order 04-A-J-3402 as approved and adopted by IDEM on January 18, 2007. The remaining conditions and respective condition citations are revised as needed.
- (k) **Section D.7**
All references to Boiler No. 6 are being revised to B-6 as needed throughout the A and D sections of the permit and to Boiler B-6 in the record keeping requirements of condition D.7.17.

The changes listed below have been made to Part 70 Operating Permit No. T141-7412-00013. The Table of Contents has been revised as needed. Deleted language appears as ~~strike throughs~~ and new language appears in bold:

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

The Permittee owns and operates a stationary power plant for heating purposes and a dry cleaning operation.

Responsible Official: ~~_____~~ Vice President for Business Operations
Source Address: 100 Facilities Building, Notre Dame, Indiana, 46556

...

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

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

- (a) One (1) No.6 fuel oil or natural gas fired boiler constructed in 1961, identified as B-1, with a single low NOx burner and Economizer installed in 2006, and with a maximum design capacity of 137 MMBtu per hour heat input, exhausting to stack S-1;

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), boiler B-1, is considered an existing large liquid fuel affected source.

- (b) Two (2) coal or natural gas fired boilers constructed in 1952, identified as B-2 and B-3, with maximum design capacities of 96 MMBtu per hour heat input each, each equipped with low NOx burners when using natural gas, and cyclones, identified as D-1 and D-2, respectively, **with both cyclones to be replaced by one (1) pulse jet fabric filter baghouse, identified as PJFF-1, for particulate control on each when combusting coal.** In addition, the following systems are connected to the baghouse PJFF-1: one (1) lime sorbent injection system, identified as SI-1, used for Hydrogen Chloride control and one (1) powdered activated carbon injection system, identified as SI-2, used for Mercury control. with The opacity is measured by a certified continuous opacity monitor identified as COM1 when combusting coal, exhausting at stack S-1.

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), the boilers B-2 and B-3, are considered existing large solid fuel affected sources.

- (c) One (1) coal, No.2 fuel oil, or natural gas fired boiler constructed in 1966, identified as B-4, with a maximum design capacity of 234 MMBtu per hour heat input, equipped with an electrostatic precipitator, identified as E-1, **with the electrostatic precipitator to be replaced by one (1) pulse jet fabric filter baghouse, identified as PJFF-2, for particulate control when combusting coal.** In addition, the following systems are connected to the baghouse PJFF-2: one (1) lime sorbent injection system, identified as SI-1, used for Hydrogen Chloride control and one (1) powdered activated carbon injection system, identified as SI-2, used for Mercury control. with The opacity is measured by a certified continuous opacity monitor identified as COM2 when combusting coal and/or oil, exhausting at stack S-2.

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), the boiler B-4, is considered an existing large solid fuel affected source.

- (d) One (1) No.2 fuel oil or natural gas boiler constructed in 1973, identified as B-5, with a maximum design capacity of 244.5 MMBtu per hour heat input, equipped with low NOx burners for natural gas and fuel oil, exhausting at stack S-3;

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), the boiler B-5, is considered an existing large liquid fuel affected source.

- (e) ...
- (g) ...
- (h) One (1) 249 MMBtu/hr boiler identified as ~~Boiler No. B-6~~, equipped with a low NOx burner and flue gas recirculation (FGR), fired primarily on natural gas with No. 2 fuel oil used as backup fuel. The unit will exhaust through stack S-9 monitored by a certified COM and NOx CEM.

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), the boiler B-6, is considered a new large liquid fuel affected source.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

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

- (a) ...
- (d) ...
- (e) **One (1) lime sorbent storage silo (Silo 1) controlled by one (1) bin vent filter (BVF-1).**
- (f) **One (1) powdered activated carbon (PAC) sorbent storage silo (Silo 2) controlled by one (1) bin vent filter (BVF-2).**
- (g) **One (1) fly and bottom ash storage silo (Ash Silo) controlled by one (1) bin vent filter (Ash Silo Bin Vent Filter).**
- (hf) ...

...

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

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. ~~326 IAC 9-1-2 is not federally enforceable.~~

C.11 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) The Permittee shall calibrate, maintain, and operate all necessary continuous opacity monitoring systems (COMS) and related equipment. For a boiler, the COMS shall be in operation at all times that the induced draft fan is in operation, ~~except as provided otherwise in the Section D requirements.~~
- (b) ...
- (d) ...
- (e) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5, **and 40 CFR Part 60 and 40 CFR Part 63.**

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] **[326 IAC 2-2] [326 IAC 2-3]**

- (a) ...
- (b) ...
- (c) If there is a ~~reasonable possibility that a~~ "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, ~~other than projects at a Clean Unit,~~ which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) ~~may result in significant emissions increase~~ and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

- (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, document and maintain the following records:

...

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] **[326 IAC 2-2]
[326 IAC 2-3]**

- (a) ...
- (e) ...

- (f) **If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C- General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing Electric Utility Steam Generating unit, then for that project the Permittee shall:**

- (1) **Submit to IDEM, OAQ a copy of the information required by (c)(1) Section C- General Record Keeping Requirements.**
- (2) **Submit a report to IDEM, OAQ within sixty (60) days after the end of each year during which records are generated in accordance with (c)(2) and (3) in Section C- General Record Keeping Requirements. The report shall contain all information and data describing the annual emissions for the emissions units during the calendar year that preceded the submission report.**

Reports required in this part shall be submitted to:

**Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251**

- (gf) **If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C- General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1 (II)) at an existing emissions unit other than an Electric Utility Steam Generating Unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:**

- (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (Hqq), for that regulated NSR pollutant, and
- (2) The emissions differ from the preconstruction projection as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(ii).

The report for a project at an existing emissions unit other than an Electric Utility Steam Generating Unit shall be submitted within sixty (60) days after the end of the year and contain the following:

- (1) **The name, address, and telephone number of the major stationary source.**
- (2) **The annual emissions calculated in accordance with (c)(2) and (3) in Section C- General Record Keeping Requirements.**
- (3) **The emissions calculated under the actual-to-projected actual test stated in**

326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).

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

Reports required in this part shall be submitted to:

**Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251**

(h) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1. [326 IAC 2-2-8(c) and/or 326 IAC 2-3-2(m)(6)]

MACT Standards [326 IAC 2-7-5(1)]

~~C.22 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]~~

~~(a) The provisions of 40 CFR Part 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the affected sources, as designated by 40 CFR Part 63.7490(a) for boilers B-2, B-3, and B-4 and 40 CFR Part 63.7506(b) for boilers B-1 and B-5, except when otherwise specified in 40 CFR Part 63 Subpart DDDDD. The Permittee must comply with these requirements on and after the effective date of 40 CFR Part 63, Subpart DDDDD.~~

~~(b) Since the applicable requirements associated with the compliance options for the affected source for the large solid fuel subcategory (boilers B-2, B-3, and B-4) are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.~~

~~C.23 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD]~~

~~(a) The affected sources are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, (40 CFR Part 63, Subpart DDDDD), as of the effective date of 40 CFR Part 63, Subpart DDDDD. Pursuant to this rule, the Permittee must comply with 40 CFR Part 63, Subpart DDDDD on and after three years after the date of publication of the final rule for 40 CFR Part 63, Subpart DDDDD in the *Federal Register*.~~

~~(b) The following emissions units comprise the affected source for the large solid fuel subcategory: boilers B-2, B-3, and B-4.~~

~~(c) The following emissions units comprise the affected source for the large liquid fuel subcategory: boilers B-1 and B-5.~~

~~(d) The definitions of 40 CFR Part 63, Subpart DDDDD at 40 CFR Part 63.7575 are applicable to the affected sources.~~

~~(e) Since the applicable requirements associated with the compliance options for the affected sources for the large solid fuel subcategory (boilers B-2, B-3, and B-4) are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition for the affected sources for the large solid fuel subcategory.~~

~~C.24 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and~~

~~_____ Institutional Boilers and Process Heaters - Notification Requirements [40 CFR Part 63, Subpart
_____ DDDDD]~~

- ~~(a) Pursuant to 40 CFR Part 63.7545(a) and 40 CFR Part 63.7506(b), the Permittee shall submit an Initial Notification for boilers B-1 and B-5 containing the information specified in 40 CFR Part 63.9(b)(2) not later than 120 days after the date of publication of the final rule for 40 CFR Part 63, Subpart DDDDD in the *Federal Register*, as required by 40 CFR Part 63.7545(b).~~
- ~~(b) Pursuant to 40 CFR Part 63.7545, the Permittee shall submit the notifications in 40 CFR Part 63.7(b) and (c), 63.8(c), (f)(4), and (f)(6), and 63.9(b) through (h) that apply to the affected sources for the large solid fuel subcategory (boilers B-2, B-3, and B-4) and chosen compliance methods by the dates specified. These notifications include, but are not limited to, the following:~~
- ~~(1) An Initial Notification containing the information specified in 40 CFR Part 63.9(b)(2) not later than 120 days after the date of publication of the final rule for 40 CFR Part 63, Subpart DDDDD in the *Federal Register*, as required by 40 CFR Part 63.7545(b).~~
- ~~(2) If required to conduct a performance test, a notification of intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required by 40 CFR Part 63.7(b)(1) and 40 CFR Part 63.7545(d).~~
- ~~(3) If required to conduct an initial compliance demonstration as specified in 40 CFR Part 63.7530(a), a Notification of Compliance Status containing the information required by 40 CFR Part 63.9(h)(2)(ii) in accordance with 40 CFR 62.7545(e).~~
- ~~(A) For each initial compliance demonstration, the Permittee shall 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 40 CFR Part 63.10(d)(2).~~
- ~~(B) The Notification of Compliance Status shall contain the items in 40 CFR Part 63.7545(e)(1) through (9), as applicable.~~
- ~~(4) If required to use a continuous monitoring system (CMS), notification of a performance evaluation, if required, as specified in 40 CFR Part 63.9(g), by the date of submission of the notification of intent to conduct a performance test.~~
- ~~(c) The notifications required by paragraphs (a) and (b) shall be submitted to:~~
- ~~Indiana Department of Environmental
Management Compliance Data Section,
Office of Air Quality 100 North Senate
Avenue,
Indianapolis, Indiana 46204-2254
and~~
- ~~United States Environmental Protection Agency,
Region V Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590~~
- ~~The notification requires the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

~~_____ [326 IAC 2-7-5~~

~~_____ The Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information regarding which compliance option or options will be chosen in the Part 70 permit for the affected sources for the large solid fuel subcategory (boilers B-2, B-3, and B-4).~~

~~(a) _____ The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Part 70 permit the applicable requirements of 40 CFR Part 63, Subpart DDDDD, a description of the affected sources and activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.~~

~~(b) _____ The significant permit modification application shall be submitted no later than nine months prior to the compliance date as specified in 40 CFR Part 63.7495(b).~~

~~(c) _____ The significant permit modification application shall be submitted to:~~

~~Indiana Department of Environmental
Management Permits Branch, Office of Air Quality
100 North Senate Avenue,
Indianapolis, Indiana 46204-2251~~

D section revisions are as follows:

SECTION D.1 FACILITY OPERATION CONDITIONS

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

(a) One (1) No.6 fuel oil or natural gas fired boiler constructed in 1961, identified as B-1, with a single low NOx burner and Economizer installed in 2006, and with a maximum design capacity of 137 MMBtu per hour heat input, exhausting to stack S-1.

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), boiler B-1, is considered an existing large liquid fuel affected source.

(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 6.5-7]

...
...

~~D.1.4 Operation Standards [326 IAC 2-1.1-5(a)(4)] [40 CFR 261] [40 CFR 279] [329 IAC 13] _____~~

~~(a) _____ The burning of hazardous waste, as defined by 40 CFR 261, is prohibited in boiler B-1. If used, any boiler tube chemical cleaning waste liquids evaporated in the boiler, and any used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste.~~

~~(b) If used, any boiler tube chemical cleaning waste liquids evaporated in the boiler shall only contain the cleaning solution and two full volume boiler rinses.~~

D.1.45 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

...

D.1.56 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD]

...

D.1.67 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

...

Compliance Determination Requirements

D.1.78 Fuel Oil Sulfur Content Limit

...

D.1.89 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-1.1-2]

...

~~D.1.10 Cleaning Waste Characterization [326 IAC 2-1.1-5(a)(4)] [40 CFR 261]~~

~~If applicable, the Permittee shall use appropriate methodology as identified in 40 CFR Part 261 to characterize all boiler chemical cleaning wastes that will be evaporated, to determine compliance with the Operation Standards condition in this D section.~~

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

D.1.944 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

...

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

D.1.102 Record Keeping Requirements

- (a) To document compliance with the SO₂ Conditions D.1.3 and D.1.89, the Permittee shall maintain records in accordance with (1) through (6) below. Records shall be complete and sufficient to establish compliance with the SO₂ limit as required in Conditions D.1.3 and D.1.89.
- (1) ...
- (2) ...
- (b) To document compliance with condition D.1.944, the Permittee shall maintain records of once per ~~day~~ shift visible emission notations of stack exhaust S-1, if boiler B-1 is the only boiler in operation for stack S-1, and it is combusting fuel oil.
- (c) ~~To document compliance with D.1.5, the Permittee shall maintain records of the results of all boiler inspections, including any additional inspections prescribed by the Preventive Maintenance Plan.~~
- (d) ~~Boiler No. B-1 is subject to notification requirements provided in 40 CFR Part 6063, Subpart DDDDD. Compliance will be demonstrated in accordance with Subpart DDDDD provisions.~~
- (de) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.113 Reporting Requirements

...

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

- (b) Two (2) coal or natural gas fired boilers constructed in 1952, identified as B-2 and B-3, with maximum design capacities of 96 MMBtu per hour heat input each, each equipped with low NOx burners when using natural gas, and cyclones, identified as D-1 and D-2, respectively, **with both cyclones to be replaced by one (1) pulse jet fabric filter baghouse, identified as PJFF-1**, for particulate control on each when combusting coal. **In addition, the following systems are connected to the baghouse PJFF-1: one (1) lime sorbent injection system, identified as SI-1, used for Hydrogen Chloride control and one (1) powdered activated carbon injection system, identified as SI-2, used for Mercury control.** The opacity is measured by a certified continuous opacity monitor identified as COM1 when combusting coal, exhausting at stack S-1.

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), the boilers B-2 and B-3, are considered existing large solid fuel affected sources.

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

...

~~D.2.4 Operation Standards [326 IAC 2-1.1-5(a)(4)] [40 CFR 261] [40 CFR 279] [329 IAC 13]~~

- ~~(a) All coal burned in boilers B-2 and B-3, including coal treated with any additive, shall meet ASTM specifications for classification as coal (ASTM D388).~~
- ~~(b) The burning of hazardous waste, as defined by 40 CFR 261, is prohibited in boilers B-2, and B-3. If used, any boiler tube chemical cleaning waste liquids evaporated in the boiler, and any used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste.~~
- ~~(c) If used, any boiler tube chemical cleaning waste liquids evaporated in the boiler shall only contain the cleaning solution and two full volume boiler rinses.~~

~~D.2.45 Preventive Maintenance Plan [326 IAC 2-7-5(13)]~~

- ~~(a) A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for boilers B-2 and B-3 and their control devices.~~
- ~~(b) The PMP for each dust collector (D-1 and D-2) shall include inspections of the internal components of each collector, conducted biannually or every 6,000 hours of operation, whichever occurs first, in accordance with the Section B - Preventive Maintenance Plan. Items to be checked include air infiltration, plugging of inlet spinner vanes, outlet tube erosion, deposits on the inside surfaces of the tubes, and plugging of the bottom of the tubes.~~

Compliance Determination Requirements

~~D.2.56 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]~~

~~Within **180 days upon initial operation of the baghouse PJFF-1** 24 months following the date of permit issuance, compliance with the PM limitations in Condition D.2.1 shall be determined by a performance stack test conducted while B-2 and B-3 are combusting coal utilizing methods as approved by the Commissioner. 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 Section C - Performance Testing.~~

~~For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.~~

~~D.2.67 Continuous Emissions Monitoring [326 IAC 3-5]~~

...
...

D.2.78 Operation of Control Equipment Cyclones [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule or in this permit, the cyclones, D1 and D2, **or pulse jet fabric filter baghouse, identified as PJFF-1**, shall be operated at all times that their respective boilers, B-2 and/or B-3 are in operation and combusting coal.

D.2.89 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-1.1-2]

...
...

D.2.10 Cleaning Waste Characterization [326 IAC 2-1.1-5(a)(4)] [40 CFR 261]

~~If applicable, the Permittee shall use appropriate methodology as identified in 40 CFR Part 261 to characterize all boiler chemical cleaning wastes that will be evaporated, to determine compliance with the Operation Standards condition in this D section.~~

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

D.2.944 Opacity Readings [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) ...
- (b) ...

This Condition D.2.9 shall cease to apply on and after September 13, 2008.

D.2.10 Bag Leak Detection Systems (BLDS)

Prior to September 13, 2008, the Permittee shall comply with the following requirements:

- (a) **The Permittee shall install and operate a continuous bag leak detection system (BLDS) for the pulse jet fabric filter baghouse, identified as PJFF-1. The bag leak detection system shall meet the following requirements:**
 - (i) **The Permittee must install and operate a bag leak detection system for each exhaust stack of the fabric filter.**
 - (ii) **The 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.**
 - (iii) **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.**
 - (iv) **The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.**
 - (v) **The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.**
 - (vi) **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.**

- (vii) **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.**
- (viii) **Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.**
- (b) **If operations continue after bag failure is observed and it will be 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.2.1142Monitoring: Cyclones [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

...

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

D.2.1243Record Keeping Requirements Check condition citations

- (a) To document compliance with Conditions D.2.1, D.2.2, D.2.67, D.2.944 and D.2.1142, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits established in Conditions D.2.1, D.2.2, D.2.67, D.2.944 and D.2.1142.

...

- (b) To document compliance with SO₂ Conditions D.2.3 and D.2.840, the Permittee shall maintain records in accordance with (1) and (2) below. Records shall be complete and sufficient to establish compliance with the SO₂ limits as required in Conditions D.2.3 and D.2.840.

(1) ...

(2) ...

- (c) ...

- (d) **To document compliance with condition D.2.10, the Permittee shall maintain records of the dates and times of all bag leak detection system alarms, the cause of each alarm, and an explanation of all corrective actions taken.**

~~To document compliance with D.2.5, the Permittee shall maintain records of the results of all boiler and emission control equipment inspections, including any additional inspections prescribed by the Preventive Maintenance Plan.~~

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

D.2.1344Reporting Requirements

- (a) ...

- (b) A quarterly report of opacity exceedances, during operation of B-2 and/or B-3 during coal combustion, to document compliance with Conditions D.2.2 and D.2.67, shall be submitted to the address listed in Section C - General Reporting Requirements, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) For boilers B-2 and B-3, a quarterly report of the calendar month average coal sulfur content, coal heat content, and sulfur dioxide emission rate in pounds per million Btus and the total monthly coal consumption shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported to document compliance with Condition D.2.89. [326 IAC 7-2-1(c)(2)]

The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (d) ...
- (e) ...

SECTION D.3 FACILITY OPERATION CONDITIONS

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

- (c) One (1) coal, No.2 fuel oil, or natural gas fired boiler constructed in 1966, identified as B-4, with a maximum design capacity of 234 MMBtu per hour heat input, equipped with an electrostatic precipitator, identified as E-1, **with the electrostatic precipitator to be replaced by one (1) pulse jet fabric filter baghouse, identified as PJFF-2**, for particulate control when combusting coal.; **In addition, the following systems are connected to the baghouse PJFF-2: one (1) lime sorbent injection system, identified as SI-1, used for Hydrogen Chloride control and one (1) powdered activated carbon injection system, identified as SI-2, used for Mercury control.** ~~with~~ The opacity is measured by a certified continuous opacity monitor identified as COM2 when combusting coal and/or oil, exhausting at stack S-2.

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), the boiler B-4, is considered an existing large solid fuel affected source.

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

...

~~D.3.4 Operation Standards [326 IAC 2-1.1-5(a)(4)] [40 CFR 261] [40 CFR 279] [329 IAC 13]~~

- ~~(a) All coal burned, including coal treated with any additive, shall meet ASTM specifications for classification as coal (ASTM D388).~~
- ~~(b) The burning of hazardous waste, as defined by 40 CFR 261, is prohibited in boiler B-4. If used, any boiler tube chemical cleaning waste liquids evaporated in the boiler, and any used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste.~~
- ~~(c) If used, any boiler tube chemical cleaning waste liquids evaporated in the boiler shall only contain the cleaning solution and two full volume boiler rinses.~~

~~D.3.45 Preventive Maintenance Plan [326 IAC 2-7-5(13)]~~

- ~~(a) A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for boiler B-4 and its control devices.~~
- ~~(b) The PMP for an electrostatic precipitator shall include the following inspections, performed according to the indicated schedules~~
 - ~~(1) Plate and electrode alignment, every major maintenance outage, but no less than every 2 years;~~
 - ~~(2) ESP TR set or Alstom Switched Integrated Rectifier (SIR) Unit components, performed whenever there is an outage of any nature lasting more than three days, unless such inspections have been performed within the last six months. At a minimum, the following inspections shall be performed:~~

- (A) ~~Internal inspection of shell for corrosion (including but not limited to doors, hatches, insulator housings, and roof area).~~
- (B) ~~Effectiveness of rapping (including but not limited to buildup of dust on discharge electrodes and plates).~~
- (C) ~~Gas distribution (including but not limited to buildup of dust on distribution plates and turning vanes).~~
- (D) ~~Dust accumulation (including but not limited to buildup of dust on shell and support members that could result in grounds or promote advanced corrosion).~~
- (E) ~~Major misalignment of plates (including but not limited to a visual check of plate alignment).~~
- (F) ~~Rapper, vibrator and TR set or SIR Unit control cabinets (including but not limited to motors and lubrication).~~
- (G) ~~Rapper assembly (including but not limited to loose bolts, ground wires, water in air lines, and solenoids).~~
- (H) ~~Vibrator and rapper seals (including but not limited to air in-leakage, wear, and deterioration).~~
- (I) ~~TR set or SIR Unit controllers (including but not limited to low voltage trip point, over current trip point, and spark rate).~~
- (J) ~~Vibrator air pressure settings.~~

Compliance Determination Requirements

D.3.56 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Within **180 days upon initial operation of the baghouse PJFF-2** ~~24 months following the date of permit issuance~~, compliance with the PM limitations in Condition D.3.1 shall be determined by a performance stack test conducted, while B-4 combusts coal, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

D.3.67 Operation of **Control Equipment** ~~Electrostatic Precipitator~~ [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, the electrostatic precipitator (ESP) **E-1, or pulse jet fabric filter baghouse, identified as PJFF-2**, shall be operated at all times that boiler B-4 vented to the ESP is in operation and combusting coal.

D.3.78 Continuous Emissions Monitoring [326 IAC 3-5]

...

D.3.89 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-1.1-2]

...

D.3.940 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3][326 IAC 7-2][326 IAC 7-1.1-2]

...

~~D.3.11 Cleaning Waste Characterization [326 IAC 2-1.1-5(a)(4)] [40 CFR 261]~~

~~If applicable, the Permittee shall use appropriate methodology as identified in 40 CFR Part 261 to characterize all boiler chemical cleaning wastes that will be evaporated, to determine compliance with the Operation Standards condition in this D section.~~

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

~~D.3.1042 Alstom Switched Integrated Rectifier (SIR) Unit [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]~~

...

~~D.3.1143 Opacity Readings [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]~~

- (a) ...
- (b) ...

This Condition D.3.11 shall cease to apply on and after September 13, 2008.

D.3.12 Bag Leak Detection Systems (BLDS)

Prior to September 13, 2008, the Permittee shall comply with the following requirements:

- (a) The Permittee shall install and operate a continuous bag leak detection system (BLDS) for the pulse jet fabric filter baghouse, identified as PJFF-2. The bag leak detection system shall meet the following requirements:**
 - (i) The Permittee must install and operate a bag leak detection system for each exhaust stack of the fabric filter.**
 - (ii) The 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.**
 - (iii) 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.**
 - (iv) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.**
 - (v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.**
 - (vi) 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.**
 - (vii) 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.**
 - (viii) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.**
- (b) If operations continue after bag failure is observed and it will be 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.

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

D.3.1314 Record Keeping Requirements

(a) To document compliance with Conditions D.3.1, D.3.2, D.3.78, D.3.1042 and D.3.1143, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits established in Conditions D.3.1, D.3.2, D.3.78, D.3.1042 and D.3.1143.

...

(b) To document compliance with SO2 Conditions D.3.3(a) and D.3.89, the Permittee shall maintain records in accordance with (1) and (2) below. Records shall be complete and sufficient to establish compliance with the SO2 limits as required in Conditions D.3.3(a) and D.3.89.

(1) ...

(2) ...

(c) To document compliance with the SO2 Conditions D.3.3(b) and D.3.940, the Permittee shall maintain records in accordance with (1) through (6) below. Records shall be complete and sufficient to establish compliance with the SO2 limit as required in Conditions D.3.3(b) and D.3.940.

...

(d) ...

(e) **To document compliance with condition D.3.12, the Permittee shall maintain records of the dates and times of all bag leak detection system alarms, the cause of each alarm, and an explanation of all corrective actions taken.** ~~To document compliance with Condition D.3.5, the Permittee shall maintain records of the results of all boiler and emission control equipment inspections, including any additional inspections prescribed by the Preventive Maintenance Plan.~~

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

D.3.1415 Reporting Requirements

(a) A quarterly report of opacity exceedances and a quarterly summary of the information to document compliance with Conditions D.3.1, D.3.2, D.3.3, D.3.940, and D.3.1143 shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

(b) A quarterly report of the calendar month average coal sulfur content, coal heat content, and sulfur dioxide emission rate in pounds per million Btus and the total monthly coal consumption shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported to document compliance with D.3.89. [326 IAC 7-2-1(c)(2)]

(c) ...

(d) ...

SECTION D.4 FACILITY OPERATION CONDITIONS

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

- (d) One (1) No.2 fuel oil or natural gas boiler constructed in 1973, identified as B-5, with a maximum design capacity of 244.5 MMBtu per hour heat input, equipped with low NOx burners for natural gas and fuel oil, exhausting at stack S-3.

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), the boiler B-5, is considered an existing large liquid fuel affected source.

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Particulate Matter Limitation (PM) [326 IAC 6.5-7]

...

D.4.2 Opacity [326 IAC 5-1]

...

D.4.3 Sulfur Dioxide Emission Limitations [326 IAC 7-1.1-2]

...

~~D.4.4 Operation Standards [326 IAC 2-1.1-5(a)(4)] [40 CFR 261] [40 CFR 279] [329 IAC 13]~~

- ~~(a) The burning of hazardous waste, as defined by 40 CFR 261, is prohibited in boiler B-5. If used, any boiler tube chemical cleaning waste liquids evaporated in the boiler, and any used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste.~~
- ~~(b) If used, any boiler tube chemical cleaning waste liquids evaporated in the boiler shall only contain the cleaning solution and two full volume boiler rinses.~~

D.4.45 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

...

Compliance Determination Requirements

D.4.56 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3][326 IAC 7-2][326 IAC 7-1.1-2]

...

~~D.4.7 Cleaning Waste Characterization [326 IAC 2-1.1-5(a)(4)] [40 CFR 261]~~

~~If applicable, the Permittee shall use appropriate methodology as identified in 40 CFR Part 261 to characterize all boiler chemical cleaning wastes that will be evaporated, to determine compliance with the Operation Standards condition in this D-section.~~

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

D.4.68 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

...

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

D.4.79 Record Keeping Requirements

- (a) ...

(b) To document compliance with Condition D.4.68, the Permittee shall maintain records of once per ~~day~~ shift visible emission notations of the boiler B-5 stack exhaust, S-3.

(c) ...

~~D.4.810~~ Reporting Requirements

...

General Construction Conditions for Generators G-8, G-9 and G-10

D.5.1 Effective Date of the Permit [IC 13-15-5-3]

...

...

D.5.5 Particulate Emission Limitations [326 IAC 6-1-2]

Pursuant to PSD Significant Source Modification 141-15828-00013, issued April 30, 2003, for generators G-8, G-9, and G-10, ~~and this permit for G-3 and G-4~~, and 326 IAC 6-1-2 (a), particulate matter emissions from the each of the diesel fired generators shall not exceed 0.03 grain per dry standard cubic foot.

D.5.6 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to the agreed order 04-A-J-3402 and 326 IAC 6-3-2 the particulate emission rate for generators G-3 and G-4 shall be determined by the table in 326 IAC 6-3-2(e) or the following equation:

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

D.5.76 Sulfur Dioxide Emission Limitations [326 IAC 7-1.1-1] [326 IAC 7-2-1]

...

~~D.5.87~~ Preventive Maintenance Plan [326 IAC 2-7-5(13)]

...

Compliance Determination Requirements

D.5.98 Sulfur Dioxide Emissions and Sulfur Content

...

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

D.5.109 Visible Emissions Notations

...

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

~~D.5.110~~ Record Keeping Requirements

...

~~D.5.124~~ Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.5.4 (a) and D.5.76 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR Part 63, Subpart A]

...
...

D.6.5 Record Keeping Requirement [40 CFR Part 63.323(d), 63.324(d) & (e)]

- (a) ...
- (b) ...
- (c) ~~To document compliance with Condition D.6.4(c), the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.~~
- (d) — All records shall be maintained in accordance with Section C - General Record Keeping.

...

SECTION D.7 FACILITY OPERATION CONDITIONS

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

- (h) One (1) 249 MMBtu/hr boiler identified as ~~Boiler No. B-6~~, equipped with a low NOx burner and flue gas recirculation (FGR), fired primarily on natural gas with No. 2 fuel oil used as backup fuel. The unit will exhaust through stack S-9 monitored by a certified COM and certified NOx CEM.

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), the boiler B-6, is considered a new large liquid fuel affected source.

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Particulate Matter Limitation (PM) [326 IAC 6-1-2]

...
...

~~D.7.11 Operation Standards [326 IAC 2-1.1-5 (a)(4)] [40 CFR 261] [40 CFR 279] [329 IAC 13]~~

- ~~(a) — The burning of hazardous waste, as defined by 40 CFR 261, is prohibited in Boiler No. 6.~~
- ~~(b) — If used, any boiler tube chemical cleaning waste liquids evaporated in the boiler shall only contain the cleaning solution and two full volume boiler rinses. Any boiler tube chemical cleaning waste liquids evaporated in the boiler, and any used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste.~~

D.7.1142 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

...

Compliance Determination Requirements

D.7.1243 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

...

D.7.1314 Fuel Oil Sulfur Content Limit

...

D.7.1415 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-1.1-2]

...

D.7.1516 Continuous Emissions Monitoring [326 IAC 3-5]

...

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

D.7.1617 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

...

Record Keeping and Reporting Requirements

D.7.1718 Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- (a) To document compliance with the SO₂ Conditions D.7.4 and D.7.1415 the Permittee shall maintain records in accordance with (1) through (6) below. Records shall be complete and sufficient to establish compliance with the SO₂ limit as required in Conditions D.7.4 and D.7.1415.
 - (1) ...
 - (6) ...
- (b) ...
- (c) ...
- (d) ~~To document compliance with D.7.12, the Permittee shall maintain records of the results of all boiler inspections, including any additional inspections prescribed by the Preventive Maintenance Plan.~~
- (e) To document compliance with D.7.6, D.7.7 and D.7.1516 the Permittee shall maintain records of the results of continuous opacity monitoring (COM) and the continuous emission monitoring (CEM) systems.
- (ef) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.7.1819 Reporting Requirements

...

SECTION D.8 FACILITY OPERATION CONDITIONS

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

...

- (a) ...
- (b) ...
- (e) **One (1) lime sorbent storage silo (Silo 1) controlled by one (1) bin vent filter (BVF-1). [326 IAC 6.5-1-2]**
- (f) **One (1) powdered activated carbon (PAC) sorbent storage silo (Silo 2) controlled by one (1) bin vent filter (BVF-2). [326 IAC 6.5-1-2]**
- (g) **One (1) fly and bottom ash storage silo (Ash Silo) controlled by one (1) bin vent filter (Ash Silo Bin Vent Filter). [326 IAC 6.5-1-2]**

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.8.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

...
...

D.8.4 Volatile Organic Compounds (VOC)

...

D.8.5 Particulate Matter Limitation (PM) [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(g), the particulate matter emissions from the lime sorbent storage silo, powdered activated carbon (PAC) sorbent storage silo and the fly and bottom ash storage silo shall not exceed 0.03 grains per dry standard cubic foot, each.

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

D.8.6 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) Visible emission (VE) notations of the bin vent exhausts shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) If abnormal emissions are observed at the stack exhaust, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions and Exceedances. Observation of abnormal emissions that do not violate an applicable opacity limit is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation of this permit.
- (c) “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) 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 the boiler.

Record Keeping and Reporting Requirements

D.8.7 Record Keeping Requirements

- (a) To document compliance with Condition D.8.6, the Permittee shall maintain records of the once per day visible emission notations of the silo bin vent exhausts.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

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

- (b) Two (2) coal or natural gas fired boilers constructed in 1952, identified as B-2 and B-3, with maximum design capacities of 96 MMBtu per hour heat input each, each equipped with low NO_x burners when using natural gas, and cyclones, identified as D-1 and D-2, respectively, with both cyclones to be replaced by one (1) pulse jet fabric filter baghouse, identified as PJFF-1, for particulate control when combusting coal. In addition, the following systems are connected to the baghouse PJFF-1: one (1) lime sorbent injection system, identified as SI-1, used for Hydrogen Chloride control and one (1) powdered activated carbon injection system, identified as SI-2, used for Mercury control. The opacity is measured by a certified continuous opacity monitor identified as COM1 when combusting coal, exhausting at stack S-1.

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), the boilers B-2 and B-3, are considered existing large solid fuel affected sources.

- (c) One (1) coal, No.2 fuel oil, or natural gas fired boiler constructed in 1966, identified as B-4, with a maximum design capacity of 234 MMBtu per hour heat input, equipped with an electrostatic precipitator, identified as E-1, with the electrostatic precipitator to be replaced by one (1) pulse jet fabric filter baghouse, identified as PJFF-2, for particulate control when combusting coal. In addition, the following systems are connected to the baghouse PJFF-2: one (1) lime sorbent injection system, identified as SI-1, used for Hydrogen Chloride control and one (1) powdered activated carbon injection system, identified as SI-2, used for Mercury control. The opacity is measured by a certified continuous opacity monitor identified as COM2 when combusting coal and/or oil, exhausting at stack S-2.

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR Part 63, Subpart DDDDD), the boiler B-4, is considered an existing large solid fuel affected source.

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

E.1.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the affected source, as designated by 40 CFR 63.7506(b), except when otherwise specified in 40 CFR Part 63 Subpart DDDDD. The Permittee must comply with these requirements one year after the effective date of 40 CFR Part 63, Subpart DDDDD.

E.1.2 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD]

- (a) The affected source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, (40 CFR Part 63, Subpart DDDDD), as of one year after the effective date of 40 CFR Part 63, Subpart DDDDD. Pursuant to this rule, the Permittee must comply with 40 CFR Part 63, Subpart DDDDD on and after September 13, 2007, three years after the date of publication of the final rule for 40 CFR Part 63, Subpart DDDDD in the Federal Register. The University of Notre Dame du lac has been granted a one (1) year extension to the compliance date of September 13, 2007 by IDEM, OAQ, Compliance Branch.
- (b) The following emissions units comprise the affected source for the large solid fuel subcategory:

- (i) The two (2) coal or natural gas fired boilers constructed in 1952, identified as B-2 and B-3, with maximum design capacities of 96 MMBtu per hour heat input each; and
- (ii) One (1) coal, No.2 fuel oil, or natural gas fired boiler constructed in 1966, identified as B-4, with a maximum design capacity of 234 MMBtu per hour heat input.

E.1.3 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD] [326 IAC 20-95]

Pursuant to CFR Part 63, Subpart DDDDD, the Permittee shall comply with the provisions of National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, which are incorporated by reference as 326 IAC 20-95, for Boilers B-2, B-3 and B-4, as specified as follows:

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.

(d) A boiler or process heater is existing if it is not new or reconstructed.

§ 63.7495 When do I have to comply with this subpart?

(b) If you have an existing boiler or process heater, you must comply with this subpart no later than September 13, 2007.

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]

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.

[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.

(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) Thoroughly 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.

$$\text{Ave Weighted Emissions} = \frac{\sum_{i=1}^n (E_r \times H_m)}{\sum_{i=1}^n H_m} \quad (\text{Eq. 1})$$

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.

$$\text{Ave Weighted Emissions} = \frac{\sum_{i=1}^n (Er \times Sm \times Cf)}{\sum_{i=1}^n Sm \times Cf} \quad (\text{Eq. 2})$$

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.

$$\text{Ave Weighted Emissions} = \frac{\sum_{i=1}^n (Er \times Hb)}{\sum_{i=1}^n Hb} \quad (\text{Eq. 3})$$

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.

$$\text{Ave Weighted Emissions} = \frac{\sum_{i=1}^n (Er \times Sa \times Cf)}{\sum_{i=1}^n Sa \times Cf} \quad (\text{Eq. 4})$$

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.

$$E_{avg} = \frac{\sum_{i=1}^n ER_i}{12} \quad (\text{Eq. 4A})$$

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.

[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?

(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.

(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.

(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.

$$Cl_{input} = \sum_{i=1}^n [(C_i)(Q_i)] \quad (Eq. 5)$$

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.

$$TSM_{input} = \sum_{i=1}^n [(M_i)(Q_i)] \quad (Eq. 6)$$

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.

$$\text{Mercury}_{\text{input}} = \sum_{i=1}^n [(HG_i)(Q_i)] \quad (\text{Eq. 7})$$

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.

(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.

$$P_{90} = \text{mean} + (\text{SD} \times t) \quad (\text{Eq. 8})$$

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 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.

$$HCl = \sum_{i=1}^n [(C_{i90})(Q_i)(1.028)] \quad (Eq. 9)$$

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.

$$TSM = \sum_{i=1}^n [(M_{i90})(Q_i)] \quad (Eq. 10)$$

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.

$$Mercury = \sum_{i=1}^n [(HG_{i90})(Q_i)] \quad (Eq. 11)$$

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).

(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.

(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;

(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.

(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.

(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.

§ 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 Rank¹” (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 Oils¹” (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]

Tables to Subpart DDDDD of Part 63

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 sub-category...	For the following pollutants...	You must meet the following emission limits and work practice standards...
9. Existing large solid fuel	a. Particulate Matter (or Total Selected Metals) b. Hydrogen Chloride c. Mercury	0.07 lb per MMBtu of heat input; or (0.001 lb per MMBtu of heat input). 0.09 lb per MMBtu of heat input. 0.000009 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
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 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).
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
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
	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).
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.
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...
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. b. Determine velocity and volumetric flow- rate of the stack gas. c. Determine oxygen and carbon dioxide concentrations of the stack	Method 1 in appendix A to part 60 of this chapter. Method 2, 2F, or 2G in appendix A to part 60 of this chapter. Method 3A or 3B in appendix A to part 60 of this chapter, or ASME PTC 19, Part 10 (1981) (IBR, see §

	<p>d. gas Measure the moisture content of the stack gas</p> <p>e. Measure the particulate matter emission concentration.</p> <p>f. Convert emissions concentrations to lb per MMBtu emission rates</p>	<p>63.14(i)). Method 4 in appendix A to part 6 this chapter.</p> <p>Method 5 or 17 (positive pressure fabric filters must use Method 5D) in appendix A to part 60 of this chapter.</p> <p>Method 19 F-factor methodology in appendix A to part 60 of this chapter.</p>
2. Total selected metals	<p>a. Select sampling ports location and the number of traverse points.</p> <p>b. Determine velocity and volumetric flow rate of the stack.</p> <p>c. Determine oxygen and carbon dioxide concentrations of the stack gas</p> <p>d. Measure the moisture content of the stack gas.</p> <p>e. Measure the total selected metals emission concentrations.</p> <p>f. Convert emissions concentration to lb per MMBtu emission rates</p>	<p>Method 1 in appendix A to part 60 of this chapter.</p> <p>Method 2, 2F, or 2G in appendix A to part 60 of this chapter.</p> <p>Method 3A or 3B in appendix A to part 60 of this chapter, or ASMEPTC 19, Part 10 (1981) (IBR, see § 63.14(i)).</p> <p>Method 4 in appendix A to part 60 of this chapter.</p> <p>Method 29 in appendix A to part 60 of this chapter.</p> <p>Method 19 F-factor methodology in appendix A to part 60 of this chapter.</p>
3. Hydrogen chloride	<p>a. Select sampling ports location and the number of traverse points.</p> <p>b. Determine velocity and volumetric flow rate of the stack gas.</p> <p>c. Determine oxygen and carbon dioxide concentrations of the stack gas.</p> <p>d. Measure the moisture content of the stack gas.</p> <p>e. Measure the hydrogen chloride emission concentration.</p> <p>f. Convert emissions concentration to lb per MMBtu emission rates.</p>	<p>Method 1 in appendix A to part 60 of this chapter.</p> <p>Method 2, 2f, or 2G in appendix A to part 60 of this chapter.</p> <p>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)).</p> <p>Method 4 in appendix A to part 60 of this chapter.</p> <p>Method 26 or 26A in appendix A to part 60 of this chapter.</p> <p>Method 19 F-factor methodology in appendix A to part 60 of this chapter.</p>
4. Mercury	<p>a. Select sampling ports location and the number of traverse points.</p> <p>b. Determine velocity and volumetric flow rate of the stack gas.</p> <p>c. Determine oxygen and carbon dioxide concentrations of the stack gas.</p> <p>d. Measure the moisture content of the stack gas.</p> <p>e. Measure the mercury emission concentration.</p>	<p>Method 1 in appendix A to part 60 of this chapter.</p> <p>Method 2, 2F, or 2G in appendix A to part 60 of this chapter.</p> <p>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)).</p> <p>Method 4 in appendix A to part 60 of this chapter.</p> <p>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)).</p>

	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. b. Determine oxygen and carbon dioxide concentrations of the stack gas. c. Measure the moisture content of the stack gas. d. Measure the carbon monoxide emission concentration.	Method 1 in appendix A to part 60 of this chapter. 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)). Method 4 in appendix A to part 60 of this chapter. 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 b. Composite fuel samples c. Prepare composited fuel samples d. Determine heat content of the fuel type e. Determine moisture content of the fuel type f. Measure mercury concentration in fuel sample g. Convert concentration into units of pounds of pollutant per MMBtu of heat content.	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. Procedure in § 63.7521(d) or equivalent. 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. ASTM D5865-04 (for coal) (IBR, see § 63.24(b)) or ASTM E711-87 (for biomass) (IBR, see § 63.14(b)) or equivalent. ASTM D3173-03 (IBR, see moisture content § 63.14(b)) or ASTM of the fuel type E871-82 (1998) (IBR, see § 63.14(b)) or equivalent. ASTM D6722-01 (for coal) (IBR, see § 63.14(b)) or SW-846-7471A (for solid .solid samples) or SW-846-7470A (for liquid samples or equivalent).
2. Total Selected metals	a. Collect fuel samples b. Composite fuel samples c. Prepare composited fuel	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. Procedure in § 63.7521(d) or equivalent. SW-846-3050B (for solid samples)

	<p>samples</p> <p>d. Determine heat content of the fuel type</p> <p>e. Determine moisture content</p> <p>f. Measure total selected metals concentration in fuel sample</p> <p>g. Convert concentrations into units of pounds of pollutant per MMBtu of heat content</p>	<p>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.</p> <p>ASTM D5865-04 (for coal) (IBR, see § 63.14(b)) or ASTM E711-87 (for biomass) (IBR, see § 63.14(b)) or equivalent.</p> <p>ASTM D3173-03 (IBR, see § 63.14(b)) or ASTM E871-82 (IBR, see § 63.14(b)) or equivalent.</p> <p>SW-846-6010B or ASTM selected metals D6357-04 (for arsenic, concentration in 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.</p>
3. Hydrogen Chloride	<p>a. Collect fuel samples</p> <p>b. Composite fuel samples</p> <p>c. Prepare composited fuel samples</p> <p>d. Determine heat content of the fuel type</p> <p>e. Determine moisture content of the fuel type</p> <p>f. Measure chlorine concentration in fuel sample</p> <p>g. Convert concentrations into units of pounds of pollutant per MMBtu of heat content</p>	<p>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.</p> <p>Procedure in §63.7521(d) or equivalent.</p> <p>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.</p> <p>ASTM D5865-04 (for coal) (IBR, see § 63.14(b)) or ASTM E711-87 (1996) (for biomass) (IBR, see § 63.14(b)) or equivalent.</p> <p>ASTM D3173-03 (IBR, see § 63.14(b)) or ASTM E871-82(1998) or equivalent.</p> <p>SW-846-9250 or ASTM D6721-01 (for coal) or ASTM E776-87 (1996) (for biomass) (IBR, see § 63.14(b)) or equivalent.</p>

[69 FR 55253, Sept. 13, 2004, as amended at 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
2. Hydrogen Chloride	b. Dry scrubber operating	i. Establish a site-specific minimum	(1) Data from the sorbent injection	(a) You must collect sorbent

	parameters	sorbent injection rate operating limit according to § 63.7530(c).	rate monitors and hydrogen chloride performance test.	injection rate data every 15 minutes during the entire period of the performance tests; (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.
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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.
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 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).

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)	This report must contain...	You must submit the report...
1. Compliance report	a. Information required in § 63.7550(c)(1) through (11); 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	Semiannually according to the requirements in § 63.7550(b).

	<p>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</p> <p>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</p> <p>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)</p>	
<p>2. An immediate startup, shutdown, and malfunction report if you had a startup, shutdown, or malfunction during the reporting inconsistent with period that is not the plan; and consistent with your startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard.</p>	<p>a. Actions taken for the event, and</p> <p>b. The information in § 63.10(d)(5)(ii)</p>	<p>i. By fax or telephone with 2 working days after starting actions inconsistent with the plan, and</p> <p>ii. By letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority.</p>

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
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§ 63.1	Applicability	Initial Applicability Determination; Applicability After Standard Established; Permit Requirements; Extensions, Notifications.	Yes.
§ 63.2	Definitions	Definitions for part 63 standards	Yes
§ 63.3	Units and Abbreviations	Units and abbreviations for part 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 Become Major	Area sources that become major must comply with major source standards by That date indicated in subpart or by 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
§ 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 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(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	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
§ 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	Yes

		adjust an opacity standard.	
§ 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 to demonstrate compliance.	Yes
§ 63.7(a)(2)(ii-viii)	[Reserved]		
§ 63.7(a)(2)(ix)	Performance Test Dates	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 80 days before the test.	No
§ 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 test 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
§ 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 CMS	Yes
§ 63.8(c)(1)(iii)	Compliance with Operation and Maintenance Requirements	Must develop and implement an SSMP for CMS	Yes
§ 63.8(c)(2)-(3)	Monitoring System Installation	Must install to get representative emission and parameter	Yes

		measurements, and must verify operational status before or at performance test	
§ 63.8(c)(4)	Continuous Monitoring System (CMS) Requirements	CMS 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
§ 63.8(c)(5)	Continuous Opacity Monitoring system (COMS) Requirements	Must do daily zero and high level calibrations	Yes
§ 63.8(c)(6)	Continuous Opacity Monitoring system (COMS) 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 computing in 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	Yes

		Contents of each.	
§ 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
§ 63.9(g)	Additional Notifications When Using Continuous Monitoring Systems	Notification of performance evaluation and notification using continuous opacity monitoring system data; and notification 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.	Yes
§ 63.10(b)(2)(xiv)	Records	All documentation supporting Initial Notification and Notification of Compliance Statue	Yes
§ 63.10(b)(3)	Records	Applicability Determinations	Yes

§ 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 Progress Reports	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 exceedence (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 exceedence (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 exceedence 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 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).	Yes
§ 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	Yes

		notifications, and requests are sent	
§ 63.14	Incorporation by Reference	Test methods incorporated by reference	Yes
§ 63.15	Availability of Information	Public and confidential information	Yes

E.1.4 Deadlines Relating to Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD]

The Permittee shall comply with the following notifications requirements by the dates listed:

Requirement	Rule Cite	Affected Facility	Deadline
Initial Notification	40 CFR 63.7545(b)	B-2, B-3 and B-4	March 12, 2005
Notification	40 CFR 63.7495(b) 40 CFR 63.9(b)	B-2, B-3 and B-4	Submit notification of startup
Compliance Date	40 CFR 63.7495(b)	B-2, B-3 and B-4	1 year after September 13, 2007
Conduct Performance Test	40 CFR 63.7510(d)	B-2, B-3 and B-4	3 years + 180 days from initial notification
Notification of Compliance Status	40 CFR 63.7545(e)	B-2, B-3 and B-4	3 years + 240 days from initial notification
Compliance Report (semiannual)	40 CFR 63.7550(b)	B-2, B-3 and B-4	Initial report by July 31, 2008 and ongoing from then.
Site-specific fuel analysis plan	40 CFR 63.7521(b)(1)	B-2, B-3 and B-4	At least 60 days before the date the source demonstrates compliance
Implementation plan for emissions averaging	40 CFR 63.7522(g)(1)	B-2, B-3 and B-4	At least 180 days before the date the source demonstrates compliance
Notification of Intent to conduct a Performance Test and Submit a QA/Test plan	40 CFR 63.7545(d)	B-2, B-3 and B-4	At least 30 days before the date the performance test is scheduled to begin
Notification of Intent to conduct a visible emissions/opacity test	40 CFR 63.7545(a)	B-2, B-3 and B-4	At least 30 days before the visible emissions/opacity test is scheduled to begin
Notification of Compliance Status	40 CFR 63.7545(e)	B-2, B-3 and B-4	Within 60 days after completing the initial performance test or compliance demonstration

Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. T141-24306-00013. The staff recommend to the Commissioner that this Part 70 Minor Source Modification be approved.

**Appendix A: Emissions Calculations
Storgae Silos**

Company Name: **University of Notre Dame du lac**
 Address City IN Zip: **100 Facilities Building, Notre Dame, IN 46556**
 Permit Number: **24306**
 Plt ID: **141-00013**
 Reviewer: **James Farrell**
 Date: **20-Mar-07**

Proposed Silos Potential Emissions

Emission Unit	Feed Rate to PJFF-1 (lbs/hr) ¹ "A"	Feed Rate to PJFF-2 (lbs/hr) ¹ "B"	Annual Hours of Operation "C"	Material Annual Throughput (tons/yr) "D" = ((A+B) × C)/2 000	Material Loading Emission Factor (lbs PM/ton throughput) ² "E"	PM/PM ₁₀ Uncontrolled Emissions (tons/yr) "F" = E × D/2000	Bin Vent Filter Control Efficiency ³ "G"	PM/PM ₁₀ Controlled Emissions (tons/yr) (F) × (1-G)	PM/PM ₁₀ Controlled Emissions (lbs/hr) (F × (1-G))2000/C
Silo 1	410	575	8,760	4,314	0.61	1.32	99%	0.0132	0.0030
Silo 2	5	8	8,760	56.9	0.61	0.02	99%	0.0002	0.00004
Ash Silo ⁴	NA	NA	8,760	17,327	0.61	5.28	99%	0.0528	0.0121
Total				21,698		6.62		0.0662	0.0151

Notes:

^{1/} Injection rate information provided by design firm.

^{2/} Material loading emission factor based on AP-42 Factor found in Chapter 11.17, *Mineral Products Industry, Lime Manufacturing*, February 1998.

^{3/} Conservative estimate for silo bin filter material

^{4/} Conservative estimate for ash silo material throughput based on 12,956 tons of coal-based ash and assuming all injected lime and PAC enters ash stream.