



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
MC 61-53 IGCN 1003
(317) 232-8603
(800) 451-6027
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TO: Interested Parties / Applicant
DATE: August 20, 2007
RE: Purdue University / 157-25072-00012
FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
 Governor

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 Commissioner

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Ms. Robin Ridgway
 Purdue University
 Freehafer Hall of Administrative Services
 401 S. Grant St.
 West Lafayette, Indiana 47907-1665

August 20, 2007

Re: 157-25072-00012
 Second Administrative Amendment to
 Part 70 Operating Permit No.: T157-7340-00012

Dear Ms. Ridgway:

Purdue University (Purdue) located in West Lafayette, Indiana was issued a Part 70 Operating Permit No.: T157-7340-00012 on June 30, 2004, for stationary boilers and other support facilities. A letter from Purdue requesting a change to this permit was received on July 25, 2007. Purdue is proposing to install a new poultry incinerator at its Animal Sciences Research and Education Center (ASREC) in West Lafayette. The new incinerator will replace an existing incinerator, and meets the definition of an insignificant activity as defined in 326 IAC 2-7-1(21). Pursuant to the provisions of 326 IAC 2-7-11a(8)(b), the permit is hereby administratively amended as follows with deleted language as ~~strikeouts~~ and new language **bolded**:

1)

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

...

(1) One (1) No. 2 fuel oil fired ~~animal carcass~~ **poultry** incinerator ~~for poultry~~, installed in ~~1991 or 1992~~ **2007**, with an afterburner and a ~~400~~ **70** lb/hr waste capacity, located at the animal sciences farm, 5675 W 600 N, West Lafayette, Indiana; [326 IAC 4-2-1]

...

2)

SECTION D.8 FACILITY OPERATION CONDITIONS

...

Insignificant Activities:

(1) One (1) No. 2 fuel oil fired ~~animal carcass~~ **poultry** incinerator ~~for poultry~~, installed in ~~1991 or 1992~~ **2007**, with an afterburner and a ~~400~~ **70** lb/hr waste capacity, located at the animal sciences farm, 5675 W 600 N, West Lafayette, Indiana;

...

3)

D.8.1 Incinerators [326 IAC 4-2-2]

...

~~(B) For the poultry and swine incinerators, each with a 100 lb/hr waste capacity, and for RAD2, with a 50 lb/hr waste capacity:~~

(B) **For the swine incinerator with a 100 lb/hr waste capacity, the poultry incinerator with a 70 lb/hr waste capacity, and RAD2 with a 50 lb/hr waste capacity:**

...

4)

The IDEM, OAQ mailing addresses now include a new mail code. The mail code for the Permits Branch and Compliance Branch is MC 61-53 IGCN 1003. The addresses were updated throughout the permit.

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

All other conditions of the permit shall remain unchanged and in effect. As a convenience, a revised copy of the entire permit is being provided. 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 Joe Sachse, at (800) 451-6027, and ask for Joe Sachse or extension 4-3350, or dial (317) 234-3350.

Sincerely,

Original Signed By:

Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

Attachments: Copy of the revised permit

IC/ajs

cc: Permit Review Section 4 – Joe Sachse
Air Compliance Section Inspector – Wanda Stanfield
Compliance Data Section
Billing, Licensing and Training Section
File – Tippecanoe County
Tippecanoe County Health Department
U.S. EPA Region V



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**PART 70 OPERATING PERMIT
 OFFICE OF AIR QUALITY**

**Purdue University
 401 S. Grant St.
 Freehafer Hall of Administrative Services
 West Lafayette, Indiana 47907-1665**

(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.: T157-7340-00012	
Original Signed by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: June 30, 2004 Expiration Date: June 30, 2009
First Significant Permit Modification No.: 157-19509-00012, issued on April 5, 2005 Second Significant Permit Modification No.: 157-22153-00012, issued on July 10, 2006 Third Significant Permit Modification No.: 157-23202-00012, issued on January 17, 2007	
Second Administrative Amendment No.: 157-25072-00012	Pages Affected: Entire Permit
Issued by: Original Signed By: Iryn Calilung Permits Branch Office of Air Quality	Issuance Date: August 20, 2007 Expiration Date: June 30, 2009

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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 stationary boilers and other support facilities for the educational services operation, located at Purdue University.

Responsible Official:	Vice President of Physical Facilities
Source Address:	401 S. Grant St., Freehafer Hall of Administrative Services, West Lafayette, Indiana 47907-1665
Mailing Address:	401 S. Grant St., Freehafer Hall of Administrative Services, West Lafayette, Indiana 47907-1665
General Source Phone Number:	(765) 496-6405
SIC Code:	8221
County Location:	Tippecanoe
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major, under PSD Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

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

This source consists of air emission units located on the main campus in West Lafayette, Indiana, and at research farms in the vicinity of 5675 West 600 North, West Lafayette, Indiana, for the Animal Sciences Research and Education Center.

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

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

- (a) One (1) spreader stoker coal fired boiler, identified as Boiler 1, with installation completed in 1960, with a maximum capacity of 281 MMBtu/hr, with a multi-cyclone collector and an electrostatic precipitator for particulate matter control, exhausting to stack WADE 01. Boiler 1 has two (2) auxiliary natural gas fired burners rated at 35 MMBtu/hr per burner, used for ignition and flame stabilization periods. Boiler 1 has a continuous emissions monitoring system (CEMS) for nitrogen oxides (NO_x) and a continuous opacity monitor (COM).

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR 63, Subpart DDDDD), Boiler 1 is considered an existing affected source. Boiler 1 is categorized under the large solid fuel subcategory.

- (b) One (1) spreader stoker coal fired boiler, identified as Boiler 2, with installation completed in 1967, with a maximum capacity of 274 MMBtu/hr, with a multi-cyclone collector and an electrostatic precipitator or a multi-compartment baghouse for particulate matter control, exhausting to stack WADE 02. Boiler 2 has two (2) auxiliary natural gas fired burners rated at 35 MMBtu/hr per burner, used for ignition and flame stabilization periods. Boiler 2 has a continuous emissions monitoring system (CEMS) for nitrogen oxides (NO_x) and a continuous opacity monitor (COM).

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR 63, Subpart DDDDD), Boiler 2 is considered an existing affected source. Boiler 2 is categorized under the large solid fuel subcategory.

- (c) One (1) circulating fluidized bed coal fired boiler, identified as Boiler 5, with installation started in 1989 and completed in 1991, with a design capacity of 279 MMBtu/hr, with a baghouse for particulate matter control and limestone injection for sulfur dioxide control, combusting natural gas for ignition, exhausting to stack WADE 05. Boiler 5 has continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and a continuous opacity monitor (COM).

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR 63, Subpart DDDDD), Boiler 5 is considered an existing affected source. Boiler 5 is categorized under the large solid fuel subcategory.

Under the Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units NSPS (40 CFR 60, Subpart Db), Boiler 5 is considered an affected source.

- (d) One (1) natural gas and distillate fuel oil fired boiler, identified as Boiler 3, with installation started in 1973 or 1974 and completed in 1974, with a maximum capacity of 163,000 pounds of steam/216 MMBtu/hr, exhausting to stack WADE 03. Boiler 3 has a continuous emissions monitoring system (CEMS) for nitrogen oxides (NO_x).

Under the Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units NSPS (40 CFR 60, Subpart D), Boiler 3 is considered an affected source.

- (e) One (1) coal storage and handling system identified as COAL Segment 1, installed in 1960, with a maximum capacity of 110 tons/hr, including: truck unloading station with two (2) hoppers; outdoor coal storage piles; two (2) vibratory feeders; one (1) underground belt conveyor with a magnetic separator; and one (1) bucket elevator terminating at the top of Wade Power House. Coal is fed to the bunkers for Boilers 1 and 2, and to the precrusher ahead of the indoor storage silo for Boiler 5. Emissions from the Boiler 1 and Boiler 2 bunkers are controlled by a RotoClone for each bunker and exhaust to stack CB1 and CB2, respectively. COAL Segment 1 has been retained as a backup system for COAL Segment 2.
- (f) One (1) coal storage and handling system identified as COAL Segment 2, installed in 1996, with a maximum capacity of 107 tons/hr, including: truck unloading station with outdoor storage piles and two (2) in-ground hoppers, two (2) vibratory feeders; one (1) totally enclosed tubular conveyor identified as BC-1 equipped with a magnetic separator and with emissions controlled by a baghouse exhausting to stack CV1; one (1) transfer enclosure with one (1) coal sampler, with emissions controlled by a baghouse exhausting to stack CV2; and one (1) totally enclosed tubular conveyor identified as BC-2 terminating at the top of Wade Power House, with emissions from the final transfer point controlled by a baghouse exhausting to stack CV3. Coal is fed to the bunkers for Boilers 1 and 2, and to the precrusher ahead of the indoor storage silo for Boiler 5. Emissions from the Boiler 1 and Boiler 2 bunkers are controlled by a RotoClone for each bunker and exhaust to stack CB1 and CB2, respectively.
- (g) One (1) coal preparation system for Boiler 5, with installation started in 1989 or 1990 and completed in 1991, with a maximum capacity of 12.68 tons/hr, including: one (1) enclosed pre-crusher; one (1) coal storage silo (aka coal storage bunker) with a baghouse exhausting to stack CB5; two (2) weigh belt feeders; and two (2) enclosed crushers.

Under the Standards of Performance for Coal Preparation Plants NSPS (40 CFR 60, Subpart Y), the coal preparation system for Boiler 5 including the crushers and COAL Segment 2 are considered affected sources.

- (h) One (1) pneumatic ash handling system for fly ash and bottom ash from Boilers 1 and 2, identified as ASH Segment 1, with a maximum capacity of 14 tons per hour, installed in approximately 1960 and modified in 2002. Ash/particulate matter collected from the primary, secondary and tertiary (baghouse) collection units are transferred to the existing ash silo. Ash accumulated in this silo is removed via a water mixer into trucks. Particulate matter that passes through the tertiary (baghouse) filter is exhausted to stack ASH1 while air from the ash silo is directed to a final filter before exhausting to stack AB1. Ash/particulate matter is transported through the system by an electric vacuum pump.
- (i) One (1) pneumatic ash handling system for fly ash and bottom ash from Boiler 5, identified as ASH Segment 2, installed in 1991 and modified in 2002, exhausting to stacks ASH5A and ASH5B, with a maximum capacity of 20 tons/hr, with dust from ash transfer to the storage silo controlled by primary and secondary separator with tertiary baghouse filter. Ash is transferred from the silo to trucks at a maximum capacity of 300 tons/hr; dust is controlled by water mix, or by use of a telescoping spout with air displaced from the truck directed through a "filter module" with five canister filters which exhaust to the atmosphere through a vent, ASH 5C.
- (j) Material handling for the limestone injection system for Boiler 5, including pneumatic conveyance from truck to bulk storage in a silo outside or to a "day bin" inside the plant at an offload rate of approximately 12.5 tons per hour; gravity fed from day bin into the boiler. Particulate emissions are controlled by a baghouse on the silo and filter cartridges on the day bin. The feed rate of limestone to the boiler varies depending on the sulfur content of the coal being fired; the average feed rate is 1 ton per hour, and the maximum rate is approximately 5 tons/hour.
- (k) One (1) 6.5 MMBtu/hr natural gas fired dual chamber animal carcass incinerator, identified as ADDL, installed in 1991, with an 800 lb/hr waste capacity, exhausting to stack PUADDL1.
- (l) One (1) 17.7 MMBtu/hr no. 2 fuel oil fired Black Start electric generator, identified as BSG, exhausting through stack BSG-1, with a fuel limit of 113,000 gallons per year.
- (m) Two (2) portable pumps powered by 350 HP no. 2 diesel fueled engines and mounted on tri-axle trailers, operated intermittently (approximately 500 hours per year each), used for pumping lagoon material to the spray irrigation system and to transfer material from one lagoon to another.

A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 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) Boilers using the following fuels:
 - (1) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, including three (3) natural gas fired Aviation Tech Building Boilers with low-NO_x combustion systems, installed in 2000, each with 2.8 MMBtu/hr heat input capacity, identified as AV Tech Boiler 1, AV Tech Boiler 2, and AV Tech Boiler 3.
 - (2) Propane or liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.

- (3) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.
- (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) Cleaners and solvents characterized as follows: [326 IAC 8-3]
 - (1) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100EF) or;
 - (2) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (d) 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]
- (e) Covered conveyors for limestone conveying of less than or equal to 7,200 tons per day for sources other than mineral processing plants constructed after August 31, 1983. [326 IAC 6-3]
- (f) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6-3]
- (g) Furnaces used for melting metals other than beryllium with a brim full capacity of less than or equal to 450 cubic inches by volume. [326 IAC 6-3]
- (h) 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]
- (i) Other activities or categories not previously identified with potential, uncontrolled emissions equal to or less than thresholds require listing only: Pb 0.6 ton per year or 3.29 pounds per day, SO₂ 5 pounds per hour or 25 pounds per day, NO_x 5 pounds per hour or 25 pounds per day, CO 25 pounds per day, PM 5 pounds per hour or 25 pounds per day, VOC 3 pounds per hour or 15 pounds per day:
 - (1) One (1) No. 2 fuel oil fired poultry incinerator, installed in 2007, with an afterburner and a 70 lb/hr waste capacity, located at the animal sciences farm, 5675 W 600 N, West Lafayette, Indiana; [326 IAC 4-2-1]
 - (2) One (1) No. 2 fuel oil fired animal carcass incinerator for swine, installed in 1991 or 1992, with an afterburner and a 100 lb/hr waste capacity, located at the animal sciences farm, 5675 W 600 N, West Lafayette, Indiana; [326 IAC 4-2-1]
 - (3) One (1) natural gas fired incinerator identified as RAD1, installed in 1986, with primary and secondary chambers and a 50 lb/hr waste capacity, for burning laboratory waste and non-infectious biological material contaminated with low level radioactivity, located at the By-Product Material Storage Building North

(BMSN). [326 IAC 4-2-1]

- (4) One (1) natural gas fired incinerator identified as RAD2, installed in 1996, with an afterburner and a 50 lb/hr waste capacity, for burning laboratory waste and non-infectious biological material contaminated with low level radioactivity, located at the By-Product Material Storage Building North (BMSN). [326 IAC 4-2-1]

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

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5] [326 IAC 2-7-4(a)(1)(D)] [IC 13-15-3-6(a)]

- (a) This permit, T157-7340-00012, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit or of permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

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

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

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

B.5 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

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

B.6 Severability [326 IAC 2-7-5(5)]

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

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

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

B.8 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

- (a) The Permittee shall furnish to IDEM, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

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

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by the “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) The “responsible official” is defined at 326 IAC 2-7-1(34).

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source’s compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All 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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

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

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

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

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

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1), (3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information 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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

B.12 Emergency Provisions [326 IAC 2-7-16]

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

causes of the emergency;

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

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

Telephone Number: 317-233-0178 (ask for Compliance Section)

Facsimile Number: 317-233-6865

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

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

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

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

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

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

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

- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.13 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

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

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

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]

- (a) All terms and conditions of permits established prior to T157-7340-00012 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit, except for permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

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

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

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

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

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

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

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

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

- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

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

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

Request for renewal shall be submitted to:

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

- (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] [40 CFR 72]

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

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

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

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

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

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

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e) without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

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

and

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

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

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and 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 Part 70 Operating Permit
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] [326 IAC 2-2-2]

- (a) A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.
- (b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2-2.

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

Upon presentation of proper identification cards, credentials, and other documents as may be

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

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

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

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

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

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

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

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

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

(ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

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

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

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

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

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

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

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

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).

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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

Compliance Requirements [326 IAC 2-1.1-11]

C.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 ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

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

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

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 22, 2004.
- (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 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(b)(3), starting in 2006 and every one (1) year thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
 - (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
 - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

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

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

- (b) The emission statement required by this permit shall be considered timely if the date

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

C.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 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:
 - (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)(iii) and/or 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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C- General Record Keeping Requirements for any "project" [as defined in 326 IAC 2-2-1 (qq) and 326 IAC 2-3-1 (ll)] at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:
- (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount [as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)] for that regulated NSR pollutant, and
 - (2) The emissions differ from the preconstruction projection as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(ii).
- (g) The report for project at an existing emissions unit shall be submitted 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
Air Compliance Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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) spreader stoker coal fired boiler, identified as Boiler 1, with installation completed in 1960, with a maximum capacity of 281 MMBtu/hr, with a multi-cyclone collector and an electrostatic precipitator for particulate matter control, exhausting to stack WADE 01. Boiler 1 has two (2) auxiliary natural gas fired burners rated at 35 MMBtu/hr per burner, used for ignition and flame stabilization periods. Boiler 1 has a continuous emissions monitoring system (CEMS) for nitrogen oxides (NO_x) and a continuous opacity monitor (COM).
- (b) One (1) spreader stoker coal fired boiler, identified as Boiler 2, with installation completed in 1967, with a maximum capacity of 274 MMBtu/hr, with a multi-cyclone collector and an electrostatic precipitator or a multi-compartment baghouse for particulate matter control, exhausting to stack WADE 02. Boiler 2 has two (2) auxiliary natural gas fired burners rated at 35 MMBtu/hr per burner, used for ignition and flame stabilization periods. Boiler 2 has a continuous emissions monitoring system (CEMS) for nitrogen oxides (NO_x) and a continuous opacity monitor (COM).

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR 63, Subpart DDDDD), Boilers 1 and 2 are considered existing affected sources. Boilers 1 and 2 are categorized under the large solid fuel subcategory.

(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 Nitrogen Oxides Emission Limitation [326 IAC 2-2]

In order to make the requirements of 326 IAC 2-2 (PSD Requirements) not applicable to the addition of natural gas fired burners to the existing Boilers 1 and 2, the following limits shall apply:

- (a) The combined natural gas usage for Boiler 1 and Boiler 2 shall not exceed 395 million cubic feet (MMCF) per twelve (12) consecutive month period. Compliance with this limit shall be determined at the end of each month.
- (b) NO_x emissions from the Boiler 1 and 2 natural gas fired burners shall not exceed 200 pounds per million cubic feet (lb/MMCF) of natural gas.

D.1.2 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating), particulate matter (PM) emissions from Boiler 1 and Boiler 2 shall not exceed 0.64 pound per million Btu heat input, based on the following equation:

$$Pt = \frac{(C)(a)(h)}{76.5(Q^{0.75})(N^{0.25})}$$

Where:	C	=	50 micrograms per cubic meter (μ/m^3)
	Pt	=	Pounds of particulate matter emitted per million Btu heat input (lb/MMBtu).
	Q	=	Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input.
	N	=	Number of stacks in fuel burning operation.
	a	=	0.67
	h	=	Stack height in feet.

For Boilers 1 and 2, Q = 555 MMBtu/hr, N = 2, and h = 200 feet.

D.1.3 Sulfur Dioxide Emission Limitations [326 IAC 2-2] [326 IAC 7-1.1-2]

- (a) Pursuant to Construction Permit PC (79) 1680, issued June 6, 1988, 326 IAC 2-2 (Prevention of Significant Deterioration), and 326 IAC 7-1.1-2, the following conditions became effective upon start-up of Boiler 5:
- (1) Sulfur dioxide emissions from Boilers 1 and 2 shall be limited to 5.43 pounds per million Btu of heat input and to a total of 26.5 tons from both boilers on any calendar day.
 - (2) The 24-hour emission limit for sulfur dioxide shall be calculated by using the sulfur content of the coal as presently reported to the OAQ in accordance with 326 IAC 3-7-2 or 3-7-3. The daily coal usage will be calculated by the use of steam production data and an evaporation factor (pounds of steam per pounds of coal). The evaporation factor shall be 8.4 pounds of steam per pound of coal. Purdue University may request a permit modification to adjust this factor if performance data warrants a review.
- (b) When the daily coal usage is 420 tons or less for these boilers, a daily sulfur dioxide emissions level need not be provided.
- (c) The stack height on the existing boilers may be increased to 65 meters without obtaining approval from the IDEM, OAQ.
- (d) The Permittee may at any time submit further modeling data in an effort to demonstrate that a higher 24-hour sulfur dioxide emission level from Boilers 1 and 2 will protect the sulfur dioxide air quality standards using procedures acceptable to the OAQ. The OAQ, after appropriate review, may adjust the 24-hour sulfur dioxide limit if the air quality analysis supports an adjusted level.

D.1.4 Temporary Alternative Opacity Limitations [326 IAC 5-1-3]

- (a) Pursuant to 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), the following applies:
- (1) When building a new fire in a boiler, or shutting down a boiler, opacity may exceed the 40% opacity limitation established by 326 IAC 5-1-2. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period. Opacity in excess of the applicable limit established in 326 IAC 5-1-2 shall not continue for more than two (2) six (6)-minute averaging periods in any twenty-four (24) hour period. [326 IAC 5-1-3(a)]

Operation of the electrostatic precipitator is not required during these times unless necessary to comply with these limits.

- (2) When removing ashes from the fuel bed or furnace in a boiler or blowing tubes, opacity may exceed the applicable limit established in 326 IAC 5-1-2 and stated in Section C - Opacity. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period and opacity in excess of the applicable limit shall not continue for more than one (1) six (6)-minute averaging period in any sixty (60) minute period. The averaging periods in excess of the limit set in 326 IAC 5-1-2 shall not be permitted for more than three (3) six (6)-minute averaging periods in a twelve (12) hour period. [326 IAC 5-1-3(b)]
- (b) If a facility cannot meet the opacity limitations of 326 IAC 5-1-3(a) or (b), the Permittee may submit a written request to IDEM, OAQ, for a temporary alternative opacity limitation in accordance with 326 IAC 5-1-3(d). The Permittee must demonstrate that the alternative limit is needed and justifiable.

D.1.5 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 these facilities without a Resource Conservation and Recovery Act (RCRA) permit. Any boiler tube chemical cleaning waste liquids evaporated in the boiler, and any binding agent or used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste. These requirements are not federally enforceable pursuant to the Title V permit.
- (c) Any boiler tube chemical cleaning waste liquids evaporated in the boiler shall only contain the cleaning solution and no more than two full volume boiler rinses.

D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan (PMP), in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for Boilers 1 and 2 and their emission control devices.

Compliance Determination Requirements

D.1.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

By December 31 of the second calendar year following the most recent stack test, or within 180 days after issuance of this permit, whichever is later, compliance with the PM limitation for Boilers 1 and 2 shall be determined by performance stack tests conducted using methods as approved by the Commissioner. This testing shall be repeated by December 31 of every second calendar year following 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.1.8 Particulate Control [326 IAC 2-7-6(6)]

- (a) Except as otherwise provided by statute or rule or in this permit, the multiclone and electrostatic precipitator (ESP) for Boiler 1 shall be in operation and control emissions at all times that the boiler, vented to that multiclone and ESP, is in operation.

- (b) Except as otherwise provided by statute or rule or in this permit, the multiclone and the ESP or a baghouse for particulate control for Boiler 2 shall be in operation and control emissions at all times that the boiler, vented to that multiclone and ESP or baghouse, is in operation.

D.1.9 Continuous Emissions Monitoring [326 IAC 3-5]

- (a) Pursuant to 326 IAC 3-5-1(2)(A) (Continuous Monitoring of Emissions), continuous emission monitoring systems for Boilers 1 and 2 shall be calibrated, maintained, and operated for measuring opacity, which meet all applicable performance specifications of 326 IAC 3-5-2.
- (b) All continuous emission monitoring systems are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.
- (c) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5 or 326 IAC 10-4.

D.1.10 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), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the equivalent of 5.43 pound per million Btu heat input, 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).
 - (4) Pursuant to 326 IAC 3-7-5(a), the Permittee 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.
- (c) 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 instead of the fuel sampling and analysis required in (b). [326 IAC 7-2-1(g)]

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

D.1.11 Monitoring: Multiclone [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) The ability of each multiclone to control particulate emissions from Boiler 1 and Boiler 2 shall be monitored at least once per day, when the unit is in operation, by measuring and recording the total static pressure drop across the multiclone. Pressure drop monitoring equipment shall be installed in accordance with Section C – Response to Excursions or Exceedances and Section C - Other Instrument Specifications.
- (b) Normal operating range will be determined and provided to IDEM within the first ninety (90) calendar days following installation of the pressure drop monitoring equipment.
- (c) Reasonable response steps shall be taken in accordance with Section C - Response to Excursions or 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 normal range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

D.1.12 Electrostatic Precipitator Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) The ability of each ESP to control particulate emissions from Boiler 1 and Boiler 2 shall be monitored once per day, when the unit is in operation, by measuring and recording the primary and secondary voltages and the currents of the transformer-rectifier (T-R) sets.
- (b) When for any one reading, operation is outside one of the normal ranges shown below, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursion or Exceedances. voltage or current reading outside the normal range is not a deviation from this permit.

Boiler 1:

- | | | |
|-----|----------------------------|--------------|
| (1) | Primary voltage: | 275 - 430 V |
| (2) | Secondary voltage: | 29 - 45 kV |
| (3) | T-R set secondary current: | 150 - 405 mA |

Boiler 2:

- | | | |
|-----|----------------------------|--------------|
| (1) | Primary voltage: | 210 - 380 V |
| (2) | Secondary voltage: | 27 - 40 kV |
| (3) | T-R set secondary current: | 200 - 420 mA |

The Permittee is not required to record the primary and secondary voltages and the currents of the transformer-rectifier (T-R) sets for the ESP for Boiler 2, when the baghouse is in operation and controlling particulate emissions from Boiler 2.

D.1.13 Opacity Readings [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) For Boiler 1:
 - (1) In the event of emissions exceeding twenty-five percent (25%) 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 or Exceedances such that the cause(s) of the excursion are identified and corrected and opacity levels are brought back below twenty-five percent (25%). Examples of expected response steps include, but are not limited to, boiler loads being reduced, adjustment of flue gas conditioning rate, and ESP T-R sets being returned to service.

- (2) Opacity readings in excess of twenty-five percent (25%) but not exceeding the opacity limit for the unit are not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) For Boiler 2:
- (1) In the event of emissions 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 or 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, and adjustment of flue gas conditioning rate, and ESP T-R sets or the baghouse, whichever is used for controlling particulate emissions from Boiler 2, being returned to service.
 - (2) Opacity readings in excess of twenty percent (20%) but not exceeding the opacity limit for the unit are not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (c) Periods of elevated opacity that are subject to a Temporary Alternative Opacity Limitation (TAOL) when building a new fire in a boiler, shutting down a boiler, removing ashes from the fuel bed or furnace in a boiler, or blowing tubes, need not be included in the averaging periods for (a) and (b) of this condition.

Note: On September 17, 2007, which is the compliance date for the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP [40 CFR Part 63, Subpart DDDDD] for Boilers 1 and 2, Condition D.1.13 will no longer be applicable to Boilers 1 and 2, as the opacity limit in 40 CFR 63, Subpart DDDDD is below the trigger in Condition D.1.13.

D.1.14 Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the baghouse used in conjunction with Boiler 2, at least once per day when the process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 9.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, and shall be calibrated in accordance with the manufacturer's specifications. The specifications shall be available on site with the Preventive Maintenance Plan.
- (c) The Permittee is not required to record the pressure drop across the baghouse for Boiler 2, when the ESP is in operation and controlling particulate emissions from Boiler 2.

D.1.15 Broken or Failed Bag Detection

For a multi-compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B

- Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Note: After the Permittee has demonstrated compliance with the compliance monitoring requirements for the baghouse or the ESP (Boiler 2) and the ESP (Boiler 1) in permit Section D.14 for the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP [40 CFR Part 63, Subpart DDDDD], Conditions D.1.12, D.1.14, and D.1.15 will no longer be applicable to Boilers 1 and 2.

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

D.1.16 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records including the following:
- (1) Monthly records of total natural gas usage for Boilers 1 and 2.
 - (2) Documentation of NO_x emission rate for the Boiler 1 and 2 gas burners.
- (b) To document compliance with Section C- Opacity, Section C - Maintenance of Continuous Opacity Monitoring Equipment, and the particulate matter and opacity Conditions D.1.2, D.1.4, D.1.7, D.1.8, D.1.9, D.1.11, D.1.12, D.1.13, and D.1.14, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the limits in Section C- Opacity and Conditions D.1.2 and D.1.4.
- (1) Data and results from the most recent stack test.
 - (2) All continuous opacity monitoring data, pursuant to 326 IAC 3-5-6.
 - (3) The results of all Method 9 visible emission readings taken during any periods of COM downtime.
 - (4) All multiclone and ESP or baghouse parametric monitoring readings.
- (c) To document compliance with SO₂ Conditions D.1.3 and D.1.10, 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 Condition D.1.3.
- (1) All fuel sampling and analysis data, pursuant to 326 IAC 7-2 or all SO₂ continuous emissions monitoring data, pursuant to 326 IAC 3-5-6, 326 IAC 7-2-1(g), and 40 CFR 60.45.
 - (2) Daily fuel usage for each of Boilers 1 and 2.
- (d) Pursuant to 326 IAC 3-7-5(b), the Permittee shall maintain records sufficient to verify compliance with the coal sampling and analysis procedures specified in 326 IAC 3-7-2 through 326 IAC 3-7-3 or records sufficient to verify compliance with 326 IAC 3-5-6 for the continuous emissions monitoring system.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.17 Reporting Requirements

- (a) A quarterly report of opacity exceedances shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within 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 the calendar month average coal sulfur content, coal heat content, and sulfur dioxide emission rate in pounds per million Btu 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. [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) A quarterly report of the natural gas usage for Boilers 1 and 2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

- (d) Pursuant to 326 IAC 3-5-7(5), reporting of continuous monitoring system 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; and
- (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).

SECTION D.2

FACILITY OPERATION CONDITIONS

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

- (c) One (1) circulating fluidized bed coal fired boiler, identified as Boiler 5, with installation completed in 1991, with a design capacity of 279 MMBtu/hr, with a baghouse for particulate matter control and limestone injection for sulfur dioxide control, combusting natural gas for ignition, exhausting to stack WADE 05. Boiler 5 has continuous emissions monitoring systems (CEMS) for nitrogen oxides (NOX) and sulfur dioxide (SO₂) and a continuous opacity monitor (COM).

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR 63, Subpart DDDDD), Boiler 5 is considered an existing affected source. Boiler 5 is categorized under the large solid fuel subcategory.

Under the Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units NSPS (40 CFR 60, Subpart Db), Boiler 5 is considered an 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.2.1 Construction Permit Limitations [326 IAC 2] [326 IAC 7-1.1-2(a)] [326 IAC 6-2-1(g)]

Pursuant to Construction Permit PC (79) 1680, issued June 6, 1988, and 326 IAC 2-2 (Prevention of Significant Deterioration), the following requirements apply to Boiler 5:

- (a) Sulfur dioxide emissions shall not exceed:
- (1) 0.9 pounds per million Btu of heat input based on a 30 day rolling weighted average basis, and
 - (2) 1.1 pounds per million Btu of heat input based on a block 24 hour average basis.
- (b) Particulate matter emissions shall not exceed 0.05 pounds per million Btu of heat input.
- (c) Carbon monoxide emissions shall not exceed 0.27 pounds per million Btu of heat input.
- (d) The rate of heat input into the boiler shall not exceed 279 million Btu per hour.
- (e) The Permittee shall, prior to any change in the operation of Boiler 5 that may result in an increase in emissions, specified in 326 IAC 2-1.1, submit a Part 70 Source Modification application to the IDEM, OAQ. No change shall be made until approval is obtained. Further, no change in emission control equipment is to be made without prior approval.

D.2.2 New Source Performance Standard (NSPS) [326 IAC 12] [40 CFR 60, Subpart Db]

Pursuant to 326 IAC 12 and 40 CFR 60, Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units) and Construction Permit PC (79) 1680, issued on June 6, 1988, emissions from Boiler 5 shall not exceed the following:

- (a) For sulfur dioxide, pursuant to 40 CFR 60.42b, emissions shall not exceed 1.2 pounds per million Btu (lb/MMBtu) of heat energy input and ten percent (10%) of the potential combustion concentration (ninety percent (90%) removal) when Boiler 5 is firing coal.

No owner or operator of an affected facility that combusts coal or oil shall cause to be discharged into the atmosphere any gases that contain sulfur dioxide in excess of 10 percent (0.10) of the potential (90 percent reduction) and that contain sulfur dioxide in excess of the emission limit determined according to the following formula:

$$E_s = (K_a H_a + K_b H_b) / (H_a + H_b)$$
 where:

E_s is the sulfur dioxide emission limit, in ng/J or lb/million Btu heat input,

K_a is 520 ng/J (or 1.2 lb/million Btu),

K_b is 340 ng/J (or 0.80 lb/million Btu),

H_a is the heat input from the combustion of coal, in J (million Btu), and

H_b is the heat input from the combustion of oil, in J (million Btu).

Only the heat input supplied to Boiler 5 from the combustion of coal and oil is counted under this section. No credit is provided for the heat input to Boiler 5 from the combustion of natural gas, wood, municipal-type solid waste, or other fuels or heat input to the affected facility from exhaust gases from another source, such as gas turbines, internal combustion engines, kilns, etc.

- (b) For particulate matter:
- (1) Pursuant to 40 CFR 60.43b, no owner or operator of an affected facility which combusts coal or combusts mixtures of coal with other fuels, shall cause to be discharged into the atmosphere from that affected facility any gases that contain particulate matter in excess of 0.051 lb/million Btu heat input,
 - (A) If the affected facility combusts only coal, or
 - (B) If the affected facility combusts coal and other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.
 - (C) For the purposes of this section, the annual capacity factor is determined by dividing the actual heat input to the steam generating unit during the calendar year from the combustion of coal, wood, or municipal-type solid waste, and other fuels, as applicable, by the potential heat input to the steam generating unit if the steam generating unit had been operated for 8,760 hours at the maximum design heat input capacity. [40 CFR 60.43b(e)]
 - (2) No owner or operator of an affected facility that combusts coal, oil, wood, or mixtures of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. [40 CFR 60.43b(f)]

(c) For nitrogen oxides, pursuant to 40 CFR 60.44b:

- (1) No owner or operator of an affected facility that is subject to the provisions of this section and that combusts only coal, oil, or natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides (expressed as NO₂) in excess of the following emission limits:

From fluidized bed combustion, not more than 0.60 lb/million Btu (lb/MMBtu) heat input.

- (2) Except as provided under paragraphs (k) and (l) of 40 CFR 60.44b, no owner or operator of an affected facility that simultaneously combusts mixtures of coal, oil, or natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides in excess of a limit determined by the use of the following formula:

$$E_n = [(EL_{go} \cdot H_{go}) + (EL_{ro} \cdot H_{ro}) + (EL_c \cdot H_c)] / (H_{go} + H_{ro} + H_c) \text{ where:}$$

E_n is the nitrogen oxides emission limit (expressed as NO₂), ng/J (lb/million Btu)

EL_{go} is the appropriate emission limit from paragraph (a)(1) for combustion of natural gas or distillate oil, ng/J (lb/million Btu)

H_{go} is the heat input from combustion of natural gas or distillate oil,

EL_{ro} is the appropriate emission limit from paragraph (a)(2) for combustion of residual oil,

H_{ro} is the heat input from combustion of residual oil,

EL_c is the appropriate emission limit from paragraph (a)(3) for combustion of coal, and

H_c is the heat input from combustion of coal.

D.2.3 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to Boiler 5 except when otherwise specified in 40 CFR Part 60, Subpart Db.

D.2.4 Temporary Alternative Opacity Limitations [326 IAC 5-1-3]

- (a) Pursuant to 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), when building a new fire in a boiler, or shutting down a boiler, opacity may exceed the 40% opacity limitation established by 326 IAC 5-1-2. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period. Opacity in excess of the applicable limit established in 326 IAC 5-1-2 shall not continue for more than two (2) six (6)-minute averaging periods in any twenty-four (24) hour period. [326 IAC 5-1-3(a)]
- (b) If a facility cannot meet the opacity limitations of 326 IAC 5-1-3(a), the Permittee may submit a written request to IDEM, OAQ, for a temporary alternative opacity limitation in accordance with 326 IAC 5-1-3(d). The Permittee must demonstrate that the alternative limit is needed and justifiable.

D.2.5 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 this facility without a Resource Conservation and Recovery Act (RCRA) permit. Any boiler tube chemical cleaning waste liquids evaporated in the boiler, and any binding agent or used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste. These requirements are not federally enforceable pursuant to the Title V permit.
- (c) Any boiler tube chemical cleaning waste liquids evaporated in the boiler shall only contain the cleaning solution and no more than two full volume boiler rinses.

D.2.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan (PMP), in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for Boiler 5 and its emission control device.

Compliance Determination Requirements

D.2.7 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

By December 31 of the second calendar year following the most recent stack test, or within 180 days after issuance of this permit, whichever is later, compliance with the Boiler 5 PM limitation in Conditions D.2.1(b) and D.2.2(b)(1) and the CO limitation in Condition D.2.1(c) shall be determined by performance stack tests conducted using methods as approved by the Commissioner. This testing shall be repeated by December 31 of every second calendar year following 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.2.8 Construction Permit Compliance Determination Requirements [326 IAC 2]

Pursuant to Construction Permit PC (79) 1680, issued June 6, 1988:

- (a) Compliance with the sulfur dioxide emission limitations shall be met by using a circulating fluidized bed boiler with alkali injection.
- (b) Compliance with the sulfur dioxide emission limits in Conditions D.2.1(a)(1) and D.2.2(a) shall be determined on a 30-day rolling weighted average emission basis. The emission rates shall be determined by using the SO₂ continuous monitoring data to calculate daily emission rates pursuant to 40 CFR 60.45b. The percent removal shall be determined by using fuel sampling and analysis to determine the incoming SO₂ emissions and using the SO₂ continuous monitoring data to determine the outlet SO₂ emissions, pursuant to 40 CFR 60.45b.
- (c) Compliance with the block 24 hour average sulfur dioxide emission limitation in Condition D.2.1(a)(2) shall be determined by using the continuous sulfur dioxide emission monitoring data. Excess 24 hour average emission rates due to startup and shutdown may be excluded from compliance determinations to the extent that they represent operation in a manner consistent with good air pollution control practice for minimizing emissions and are unavoidable.
- (d) Compliance with the particulate matter emissions limit of 0.05 pounds per million Btu of heat input shall be met by using a baghouse.
- (e) Compliance with the heat input limit shall be determined on a 30-day rolling weighted average basis.

D.2.9 NSPS Compliance Provisions [326 IAC 12] [40 CFR 60, Subpart Db]

Pursuant to 326 IAC 12 and 40 CFR 60, Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units):

(a) For sulfur dioxide:

- (1) Compliance with the sulfur dioxide emission limits, fuel oil sulfur limits, and/or percent reduction requirements under 40 CFR 60.42b are determined on a 30-day rolling average basis. [40 CFR 60.42b(e)]
- (2) The sulfur dioxide emission limits and percent reduction requirements under 40 CFR 60.42b apply at all times, including periods of startup, shutdown, and malfunction. [40 CFR 60.42b(g)] [40 CFR 60.45b(a)]
- (3) Compliance with the sulfur dioxide emission limits and percent reduction requirements under 40 CFR 60.42b is based on the average emission rates and the average percent reduction for sulfur dioxide for 30 successive steam generating unit operating days, except as provided under 60.42b(d). A separate performance test is completed at the end of each steam generating unit operating day after the initial performance test, and a new 30-day average emission rate and percent reduction for sulfur dioxide are calculated to show compliance with the standard. [40 CFR 60.45b(g)]
- (4) Except as provided under paragraph (i) of 40 CFR 60.45b, the owner or operator of an affected facility shall use all valid sulfur dioxide emissions data in calculating the percent sulfur dioxide emission rate ($\% P_s$) and the hourly sulfur dioxide emission rate (E_{ho}) under paragraph (c) of 40 CFR 60.45b whether or not the minimum emissions data requirements under 40 CFR 60.46b are achieved. All valid emissions data, including valid sulfur dioxides emission data collected during periods of startup, shutdown and malfunction, shall be used in calculating $\% P_s$ and E_{ho} pursuant to paragraph (c) of 40 CFR 60.45b. [40 CFR 60.45b(h)]

(b) For particulate matter:

The particulate matter emission standards and opacity limits under 40 CFR 60.43b apply at all times except during periods of startup, shutdown, or malfunction. [40 CFR 60.46b(a)]

(c) For nitrogen oxide:

- (1) The nitrogen oxides emission standards under 40 CFR 60.44b apply at all times including periods of startup, shutdown, or malfunction. [40 CFR 60.44b(h)] [40 CFR 60.46b(a)]
- (2) Compliance with the nitrogen oxide emission limits under 40 CFR 60.44b is determined on a 30-day rolling average basis. [40 CFR 60.44b(i)]
- (3) The owner or operator of an affected facility which combusts coal shall determine compliance with the nitrogen oxides emission standards under 40 CFR 60.44b on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly nitrogen oxides emission data for the preceding 30 steam generating unit operating days. [40 CFR 60.46b(e)(2)]

D.2.10 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 12] [40 CFR 60, Subpart Db] [326 IAC 2-2]

- (a) Pursuant to Construction Permit PC (79) 1680, issued June 6, 1988; 326 IAC 3-5 (Continuous

Monitoring of Emissions); 326 IAC 2-2 (Prevention of Significant Deterioration); and 40 CFR 60 Subpart Db, continuous emission monitoring systems (CEMS) for Boiler 5 shall be calibrated, maintained, and operated for measuring opacity, SO₂, NO_x and either CO₂ or O₂, which meet the performance specifications of 326 IAC 3-5-2 and 40 CFR 60.47b and 60.48b.

- (b) All continuous emission monitoring systems are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.
- (c) For sulfur dioxides:
 - (1) The use of limestone injection for SO₂ control precludes the use of a CEM system to measure the pre-control SO₂ emission rates. The pre-control SO₂ emission rates and percent reduction shall be determined using daily as-fired fuel sampling and analysis. Pursuant to 40 CFR 60.47b(b), the owner or operator shall determine the average sulfur dioxide emissions and percent reduction by:
 - (A) Collecting coal or oil samples in an as-fired condition at the inlet to the steam generating unit and analyzing them for sulfur and heat content according to Method 19. Method 19 provides procedures for converting these measurements into the format to be used in calculating the average sulfur dioxide input rate, or
 - (B) Measuring sulfur dioxide according to Method 6B at the inlet or outlet to the sulfur dioxide control system. An initial stratification test is required to verify the adequacy of the Method 6B sampling location. The stratification test shall consist of three paired runs of a suitable sulfur dioxide and carbon dioxide measurement train operated at the candidate location and a second similar train operated according to the procedures in section 3.2 and the applicable procedures in section 7 of Performance Specification 2. Method 6B, Method 6A, or a combination of Methods 6 and 3 or 3B or Methods 6C and 3A are suitable measurement techniques. If Method 6B is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent.
 - (C) A daily sulfur dioxide emission rate, E_D, shall be determined using the procedure described in Method 6A, section 7.6.2 (Equation 6A-8) and stated in lb/million Btu heat input.
 - (D) The mean 30-day emission rate is calculated using the daily measured values in lb/million Btu for 30 successive steam generating unit operating days using equation 19-20 of Method 19.
 - (E) Pursuant to 326 IAC 3-7-5(a), the Permittee 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.
 - (2) The owner or operator of an affected facility shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement

the emission data with data collected with other monitoring systems as approved by the Administrator or the reference methods and procedures as described in paragraph (b) of 40 CFR 60.47b. [40 CFR 60.47b(c)]

- (3) The 1-hour average sulfur dioxide emission rates measured by the CEMS required by paragraph (a) of 40 CFR 60.47b and required under 40 CFR 60.13(h) is expressed in ng/J or lb/million Btu heat input and is used to calculate the average emission rates under 40 CFR 60.42b. Each 1-hour average sulfur dioxide emission rate must be based on more than 30 minutes of steam generating unit operation and include at least 2 data points with each representing a 15-minute period. Hourly sulfur dioxide emission rates are not calculated if the affected facility is operated less than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day. [40 CFR 60.47b(d)]
 - (4) The procedures under 40 CFR 60.13 shall be followed for installation, evaluation, and operation of the CEMS. [40 CFR 60.47b(e)]
 - (5) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 of 40 CFR 60 Appendix B. [40 CFR 60.47b(e)(1)]
 - (6) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of 40 CFR 60 Appendix F. [40 CFR 60.47b(e)(2)]
 - (7) For affected facilities combusting coal, alone or in combination with other fuels, the span value of the sulfur dioxide CEMS at the inlet to the sulfur dioxide control device is 125 percent of the maximum estimated hourly potential sulfur dioxide emissions of the fuel combusted. [40 CFR 60.47b(e)(3)]
- (d) For nitrogen oxides:
- (1) The continuous monitoring systems required under paragraph (b) of 40 CFR 60.48b shall be operated and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments. [40 CFR 60.48b(c)]
 - (2) The 1-hour average nitrogen oxides emission rates measured by the continuous nitrogen oxides monitor required by paragraph (b) of 40 CFR 60.48b and required under 40 CFR 60.13(h) shall be expressed in lb/million Btu heat input and shall be used to calculate the average emission rates under 40 CFR 60.44b. The 1-hour averages shall be calculated using the data points required under 40 CFR 60.13(b). At least two (2) data points must be used to calculate each 1-hour average. [40 CFR 60.48b(d)]
 - (3) The procedures under 40 CFR 60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems. [40 CFR 60.48b(e)]
 - (4) For affected facilities combusting coal, the span value for nitrogen oxides is 1,000 PPM. [40 CFR 60.48b(e)(2)]

- (5) When nitrogen oxides emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days. [40 CFR 60.48b(f)]
- (e) For opacity:
 - (1) The procedures under 40 CFR 60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems. [40 CFR 60.48b(e)]
 - (2) For affected facilities combusting coal, the span value for a continuous monitoring system for measuring opacity shall be between 60 and 80 percent. [40 CFR 60.48b(e)(1)]
- (f) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5, 326 IAC 10-4, 40 CFR 60, or 40 CFR 75.

D.2.11 Operation of Baghouse [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule or in this permit, the baghouse shall be operated at all times that Boiler 5 is in operation.

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

D.2.12 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) The Permittee shall record the drop across the Boiler 5 baghouse, at least once per day when the boiler is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, and shall be calibrated in accordance with the manufacturer's specifications. The specifications shall be available on site with the Preventive Maintenance Plan.

D.2.13 Broken or Failed Bag Detection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the

emergency provisions of this permit (Section B - Emergency Provisions).

- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse-s pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Note: After the Permittee has demonstrated compliance with the compliance monitoring requirements for the baghouse (Boiler 5) in permit Section D.14 for the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP [40 CFR Part 63, Subpart DDDDD], Conditions D.2.12, and D.2.13 will no longer be applicable to Boiler 5.

D.2.14 SO₂ Monitoring System Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

Whenever the SO₂ continuous emission monitoring system is malfunctioning or down for repairs or adjustments, the Permittee shall monitor and record boiler load, fuel sulfur content, and limestone injection rate, to demonstrate that the operation of the limestone injection system continues in a manner typical for the boiler load and sulfur content of the coal fired. Limestone injection parametric monitoring readings shall be recorded at least once per hour until the primary CEMS or a backup CEMS is brought online.

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

D.2.15 Record Keeping Requirements

- (a) To document compliance with Section C - Maintenance of Continuous Opacity Monitoring Equipment, and the particulate matter and opacity requirements in Conditions D.2.1, D.2.2, D.2.3, D.2.8, D.2.10, D.2.12, and D.2.13, the Permittee shall maintain records in accordance with (1) through (3) below. Records shall be complete and sufficient to establish compliance with the limits in Conditions D.2.1, D.2.2, and D.2.3.
- (1) Data and results from the most recent stack test.
 - (2) All continuous opacity monitoring data, pursuant to 326 IAC 3-5-6 and 40 CFR 60.42(a)(2).
 - (3) The results of all Method 9 visible emission readings taken during any periods of COM downtime.
- (b) To document compliance with the SO₂ requirements in Conditions D.2.1, D.2.2, D.2.8, D.2.9, D.2.10, and D.2.14, the Permittee shall maintain records in accordance with (1) through (4) below. Records shall be complete and sufficient to establish compliance with the applicable SO₂ limit(s) as required in Conditions D.2.1, D.2.2, D.2.8, D.2.9, and D.2.10. The Permittee shall maintain records in accordance with (3) and (4) below during SO₂ CEM system downtime.
- (1) All SO₂ continuous emissions monitoring data, pursuant to 326 IAC 3-5-6, 326 IAC 7-2-1(g), and 40 CFR 60.45.
 - (2) All startup periods and shutdown periods.
 - (3) All boiler load, fuel sampling and analysis, and limestone injection rate data

collected for SO₂ CEMS downtime, in accordance with Conditions D.2.10 and D.2.14.

- (4) Actual fuel usage during each SO₂ CEM system downtime.
- (c) To document compliance with the NO_x requirements in Conditions D.2.2 and D.2.10, the Permittee shall maintain records of all NO_x and CO₂ or O₂ continuous emissions monitoring data, pursuant to 326 IAC 3-5-6 and 40 CFR 60.45. Records shall be complete and sufficient to establish compliance with the NO_x limit as required in Conditions D.2.2 and D.2.10.
- (d) To document compliance with the heat input limit in Condition D.2.1(d), the Permittee shall maintain records of Boiler 5 hourly heat input readings derived from CEMS data, or the amount of coal and the heat content of the coal fired in Boiler 5.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.16 Reporting Requirements

- (a) A quarterly report of opacity exceedances and a quarterly summary of the information to document compliance with Conditions D.2.1, D.2.3, D.2.8, D.2.9, and D.2.10 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. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Pursuant to Condition D.2.8(c) regarding the block 24 hour average SO₂ emission limitation, the quarterly report for SO₂ shall explain whether any excess 24 hour average emission rates due to startup and shutdown were excluded from the compliance determination.
- (b) Pursuant to 40 CFR 60.49b, excess emissions and monitoring system performance (MSP) reports shall be submitted to the administrator semi-annually for each six month period in the calendar year. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. Each excess emission and MSP report shall include the information required in 40 CFR 60.7(c). The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

If the Permittee elects to combine the excess emission and MSP reports with the quarterly reports required under part (a) of this condition, the reports submitted pursuant to (a) must also include all information required in 40 CFR 60.7(c), and each report must state precisely which state and federal requirements are satisfied by the report.
- (c) All reports submitted pursuant to this condition shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (d) Pursuant to 326 IAC 3-5-7(5), reporting of continuous monitoring system 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; and
- (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).

SECTION D.3

FACILITY OPERATION CONDITIONS

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

- (d) One (1) natural gas and distillate fuel oil fired boiler, identified as Boiler 3, with installation started in 1973 or 1974 and completed in 1974, with a maximum capacity of 163,000 pounds of steam/216 MMBtu/hr, exhausting to stack WADE 03. Boiler 3 has a continuous emissions monitoring system (CEMS) for nitrogen oxides (NOX).

Under the Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units NSPS (40 CFR 60, Subpart D), Boiler 3 is considered an 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 New Source Performance Standard (NSPS) [326 IAC 12] [40 CFR 60, Subpart D]

Pursuant to 326 IAC 12 and 40 CFR 60, Subpart D (Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971), emissions from Boiler No. 3 shall not exceed the following:

- (a) 0.10 pound PM per million Btu (MMBtu) heat input derived from fossil fuel. [40 CFR 60.42(a)(1)]
- (b) For opacity:
- (1) Twenty percent (20%) opacity except for one six-minute period per hour of not more than twenty-seven percent (27%) opacity. [40 CFR 60.42(a)(2)]
 - (2) Pursuant to 40 CFR 60.11(c), the NSPS opacity standard of 40 CFR 60.42(a)(2) shall apply at all times except during periods of startup, shutdown, or malfunction. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions [40 CFR 60.11(d)].
- (c) For SO₂:
- (1) 0.80 pound SO₂ per million Btu (MMBtu) heat input derived from liquid fossil fuel. [40 CFR 60.43(a)(1)]
 - (2) When combusting different fossil fuels simultaneously, the applicable SO₂ limit shall be determined using the formula in 40 CFR 60.43(b).
 - (3) Compliance shall be based on the total heat input from all fossil fuels burned, including gaseous fuels. [40 CFR 60.43(c)]
- (d) For NO_x:
- (1) 0.20 pound NO_x per million Btu (MMBtu) heat input derived from gaseous fossil fuel. [40 CFR 60.44(a)(1)]

- (2) 0.30 pound NO_x per million Btu (MMBtu) heat input derived from liquid fossil fuel. [40 CFR 60.44(a)(2)]
- (e) The usage of distillate fuel oil in Boiler 3 shall be limited to 500,000 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (f) Any change in the type of fuel oil used in Boiler 3, other than distillate fuel oil and natural gas, must be approved by IDEM, OAQ.

D.3.2 Temporary Alternative Opacity Limitations [326 IAC 5-1-3]

- (a) Pursuant to 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), when building a new fire in a boiler, or shutting down a boiler, opacity may exceed the 40% opacity limitation established by 326 IAC 5-1-2. However, opacity levels shall not exceed sixty percent (60%) for any six (6)-minute averaging period. Opacity in excess of the applicable limit established in 326 IAC 5-1-2 shall not continue for more than two (2) six (6)-minute averaging periods in any twenty-four (24) hour period. [326 IAC 5-1-3(a)]
- (b) If a facility cannot meet the opacity limitations of 326 IAC 5-1-3(a), the Permittee may submit a written request to IDEM, OAQ, for a temporary alternative opacity limitation in accordance with 326 IAC 5-1-3(d). The Permittee must demonstrate that the alternative limit is needed and justifiable.

D.3.3 Sulfur Dioxide (SO₂) [326 IAC 7-1.1]

Pursuant to 326 IAC 7-1.1-2(a)(3), sulfur dioxide emissions from Boiler 3 shall not exceed five-tenths (0.5) pound per million Btu when combusting only distillate oil or a combination of only distillate oil and natural gas.

D.3.4 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 this facility without a Resource Conservation and Recovery Act (RCRA) permit. Any boiler tube chemical cleaning waste liquids evaporated in the boiler, and any binding agent or used oil combusted shall meet the toxicity characteristic requirements for non-hazardous waste. These requirements are not federally enforceable pursuant to the Title V permit.
- (b) Any boiler tube chemical cleaning waste liquids evaporated in the boiler shall only contain the cleaning solution and no more than two full volume boiler rinses.

D.3.5 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to Boiler 3 except when otherwise specified in 40 CFR Part 60, Subpart D.

D.3.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan (PMP), in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for Boiler 3 and any emission control devices.

Compliance Determination Requirements

D.3.7 Testing Requirements [326 IAC 2-7-6(1), (3), (6)] [326 IAC 2-1.1-11] [40 CFR 60.8] [40 CFR 60.46]

Within 180 days following issuance of this Part 70 permit, the Permittee shall conduct initial performance tests for Boiler 3 for NSPS Subpart D while firing fuel oil. Performance tests shall be conducted for particulate matter (PM), SO₂, and NO_x, and data reduced in accordance with the test methods and procedures contained in 40 CFR 60.8 and 40 CFR 60.46 unless the Administrator approves an alternative in accordance with 40 CFR 60.8(b).

D.3.8 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 12] [40 CFR 60, Subpart D] [326 IAC 2-2]

(a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions) and 40 CFR 60.45, continuous emission monitoring systems for Boiler 3 shall be calibrated, maintained, and operated for measuring NO_x and either O₂ or CO₂, which meet the performance specifications of 326 IAC 3-5-2 and 40 CFR 60.45, except as provided in paragraph (b) of 40 CFR 60.45.

(1) All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under 40 CFR 60.8. [40 CFR 60.13(b)]

(2) Pursuant to 40 CFR 60.13(e), except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under paragraph (d) of 40 CFR 60.13, all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(A) All continuous monitoring systems referenced by paragraph (c) of this section for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(3) Excess NO_x emissions for affected facilities using a continuous monitoring system for measuring nitrogen oxides are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of exceed the applicable standards under 40 CFR 60.44. [40 CFR 60.45(g)(3)]

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

(b) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring procedures or requirements of 40 CFR 60 including, but not limited to, alternative monitoring requirements when the affected facility is infrequently operated. [40 CFR 60.13(i)]

“Administrator” means the Administrator of the Environmental Protection Agency or his authorized representative. [40 CFR 60.2]

(c) If the Administrator approves alternative monitoring requirements in lieu of the COM requirements for Boiler 3, then IDEM, OAQ, may require additional PM stack testing and Method 9 opacity readings to demonstrate compliance with 326 IAC 5-1 and 326 IAC 6-2, pursuant to 326 IAC 3-5-1(c)(2)(A)(ii).

(d) Nothing in this permit shall excuse the Permittee from complying with the requirements to

operate a continuous emission monitoring system pursuant to 326 IAC 3-5, 326 IAC 10-4, 40 CFR 60, or 40 CFR 75.

- (e) The following requirements shall apply in order to demonstrate compliance with 40 CFR 60, Subpart D, 326 IAC 5-1 and 326 IAC 6-2 in lieu of the COM requirements for Boiler 3 as approved by the Administrator:
- (1) An observer certified in accordance with EPA Method 9 shall perform 6-minute visible emissions observations at least once per day during daylight hours when distillate fuel oil is burned in Boiler 3.
 - (2) If the average opacity for a 6-minute set of visible emissions observations made exceeds ten (10) percent, the observer shall collect two additional 6-minute sets of visible emissions observations for a total of three data sets. If excess emissions as defined in Condition D.3.11(b) occur during the three 6-minute sets of visible emissions observations, the observer shall collect additional 6-minute sets of visible emissions observations until excess emissions do not occur during three (3) consecutive 6-minute sets of visible emissions observations. Boiler 3 may be repaired or adjusted before the additional visible emissions observations are conducted.

D.3.9 Sulfur Dioxide Emissions and Sulfur Content [40 CFR 60.45] [326 IAC 12] [326 IAC 3] [326 IAC 7-2] [326 IAC 7-1.1-2]

- (a) Pursuant to 40 CFR 60.45(b)(2), the Permittee shall monitor sulfur dioxide emissions by fuel sampling and analysis.
- (b) Pursuant to 326 IAC 7-2-1(c), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the equivalents of the limits specified in Condition D.3.1(c) and D.3.3, using a calendar month average.
- (c) 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 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.
- (d) 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)]

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

D.3.10 Record Keeping Requirements

- (a) To document compliance with the particulate matter and opacity requirements in Conditions D.3.1, D.3.2, D.3.7, and D.3.8, the Permittee shall maintain records in accordance with (1) through (5) below. Records shall be complete and sufficient to establish compliance with the PM and opacity limits in Conditions D.3.1 and D.3.2.
 - (1) Data and results from the most recent stack test;

- (2) Actual distillate fuel oil usage in Boiler 3 per month since last compliance determination period.
 - (3) Calendar dates covered in the compliance determination period;
 - (4) The results of all once per day Method 9 visible emission (VE) readings due to opacity exceeding ten percent (10%).
 - (5) Hours of operation on fuel oil.
- (b) To document compliance with the SO₂ requirements in Conditions D.3.1, D.3.3, D.3.7, D.3.8, and D.3.9, 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 in Conditions D.3.1 and D.3.3.
- (1) All fuel sampling and analysis data, pursuant to 326 IAC 7-2 and 40 CFR 60.45.
 - (2) Actual fuel usage since last compliance determination period.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.11 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Condition D.3.1(e) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The Permittee shall submit an excess emissions report (EER) to IDEM, OAQ for each calendar quarter in which there are excess emissions of opacity during combustion of distillate fuel oil. If there are no excess emissions of opacity during a calendar quarter, the EER may be submitted on a semiannual basis. Excess emissions are defined as any 6-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one (1) 6-minute average per hour of up to 27% opacity need not be reported.
- (c) To document compliance with Condition D.3.1 and pursuant to 40 CFR 60.45(g), excess emissions and monitoring system performance (MSP) reports shall be submitted to the administrator semi-annually for each six month period in the calendar year. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. Each excess emission and MSP report shall include the information required in 40 CFR 60.7(c).

If the Permittee elects to combine the excess emission and MSP reports with the quarterly reports required under part (a) of this condition, the reports submitted pursuant to (a) must also include all information required in 40 CFR 60.7(c), and each report must state precisely which state and federal requirements are satisfied by the report.

These reports shall be submitted to:

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

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

- (d) The Permittee shall furnish the Administrator a written report of the results of the initial performance tests for NSPS Subpart D and any subsequent performance tests in accordance with 40 CFR 60.8.

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

- (e) Upon request of the IDEM, OAQ, reports of the calendar month average sulfur content, heat content, fuel consumption, and sulfur dioxide emission rate in pounds per million Btu shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit. [326 IAC 7-2-1(c)(3)]

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

- (f) Pursuant to 326 IAC 3-5-7(5), reporting of continuous monitoring system 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; and
- (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).

SECTION D.4

FACILITY OPERATION CONDITIONS

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

- (e) One (1) coal storage and handling system identified as COAL Segment 1, installed in 1960, with a maximum capacity of 110 tons/hr, including: truck unloading station with two (2) hoppers; outdoor coal storage piles; two (2) vibratory feeders; one (1) underground belt conveyor with a magnetic separator; and one (1) bucket elevator terminating at the top of Wade Power House. Coal is fed to the bunkers for Boilers 1 and 2, and to the precrusher ahead of the indoor storage silo for Boiler 5. Emissions from the Boiler 1 and Boiler 2 bunkers are controlled by a RotoClone for each bunker and exhaust to stack CB1 and CB2, respectively. COAL Segment 1 has been retained as a backup system for COAL Segment 2.
- (f) One (1) coal storage and handling system identified as COAL Segment 2, installed in 1996, with a maximum capacity of 107 tons/hr, including: truck unloading station with outdoor storage piles and two (2) in-ground hoppers, two (2) vibratory feeders; one (1) totally enclosed tubular conveyor identified as BC-1 equipped with a magnetic separator and with emissions controlled by a baghouse exhausting to stack CV1; one (1) transfer enclosure with one (1) coal sampler, with emissions controlled by a baghouse exhausting to stack CV2; and one (1) totally enclosed tubular conveyor identified as BC-2 terminating at the top of Wade Power House, with emissions from the final transfer point controlled by a baghouse exhausting to stack CV3. Coal is fed to the bunkers for Boilers 1 and 2, and to the precrusher ahead of the indoor storage silo for Boiler 5. Emissions from the Boiler 1 and Boiler 2 bunkers are controlled by a RotoClone for each bunker and exhaust to stack CB1 and CB2, respectively.
- (g) One (1) coal preparation system for Boiler 5, with installation started in 1989 or 1990 and completed in 1991, with a maximum capacity of 12.68 tons/hr, including: one (1) enclosed pre-crusher; one (1) coal storage silo (aka coal storage bunker) with a baghouse exhausting to stack CB5; two (2) weigh belt feeders; and two (2) enclosed crushers.

Under the Standards of Performance for Coal Preparation Plants NSPS (40 CFR 60, Subpart Y), the coal preparation system for Boiler 5 including the crushers and COAL Segment 2 are considered affected sources.

Insignificant Activities:

Coal bunker and coal scale exhausts and associated dust collector vents.

(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 New Source Performance Standard (NSPS) [326 IAC 12] [40 CFR 60, Subpart Y]

Pursuant to 326 IAC 12 and 40 CFR 60, Subpart Y (Standards of Performance for Coal Preparation Plants) the exhaust from the following coal processing and handling equipment shall not exhibit opacity greater than or equal to twenty percent (20%) [40 CFR 60.252(c)]:

- (a) the conveyors of COAL Segment 2, beginning after the coal storage piles, but not including the conveyor section(s) used solely to feed the bunkers for Boilers 1 and 2; and
- (b) the Boiler 5 coal preparation system.

D.4.2 PSD Minor Limit [326 IAC 2-2-1]

- (a) In order to make the requirements of 326 IAC 2-2-1(x) and 326 IAC 2-2-1(jj) (PSD Requirements) not applicable to COAL Segment 2, the emissions from the coal storage and handling equipment included in COAL Segment 2 shall be limited to less than twenty-five (25) tons of particulate matter (PM) per twelve (12) consecutive month period and less than fifteen (15) tons of PM₁₀ per twelve (12) consecutive month period. Compliance with these limits shall be determined at the end of each month.
- (b) Pursuant to Construction Permit CP 157-3617, issued July 7, 1994, emissions from the coal storage and handling equipment included in COAL Segment 2 shall be limited as follows:
- (1) Particulate matter (PM) emissions shall not exceed 5.7 pounds per hour.
 - (2) PM₁₀ emissions shall not exceed 3.4 pounds per hour.
 - (3) All three baghouses (CV1, CV2, and CV3) shall remain operational at all times that the associated coal processing or conveyors are in use.

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

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the COAL Segment 1 shall not exceed 52.23 pounds per hour when operating at a process weight rate of 110 tons per hour, and the allowable particulate emission rate from the COAL Segment 2 shall not exceed 51.96 pounds per hour when operating at a process weight rate of 107 tons per hour. These pounds per hour limitations was calculated using the following equation:

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

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

- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the Boiler 5 coal preparation system shall not exceed 22.48 pounds per hour when operating at a process weight rate of 12.68 tons per hour. The pounds per hour limitation was calculated using the following equation:

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

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

D.4.4 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the coal processing and conveying equipment identified in Condition D.4.1 except when otherwise specified in 40 CFR Part 60, Subpart Y.

D.4.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan (PMP), in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their emission control devices.

Compliance Determination Requirements

**D.4.6 NSPS Test Methods and Procedures [326 IAC 2-7-6(1), (3), (6)] [326 IAC 2-1.1-11]
[40 CFR 60.8] [40 CFR 60.46]**

Within 180 days of issuance of this Part 70 permit, the Permittee shall conduct initial performance tests for NSPS Subpart Y. Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in 40 CFR 60.8 and 40 CFR 60.254 unless the Administrator approves an alternative in accordance with 40 CFR 60.8(b). [40 CFR 60.8]

D.4.7 NSPS Compliance Provisions [326 IAC 12] [40 CFR 60, Subpart Y]

Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.
[40 CFR 60.254(b)(2)]

D.4.8 Particulate Control [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule or in this permit, in order to comply with Conditions D.4.1, D.4.2, and D.4.3, the RotoClones, cartridge filters, and baghouses for particulate control shall be in operation and control emissions at all times the associated coal processing or conveying is in operation.

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

D.4.9 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) Visible emission notations of the coal unloading station shall be performed once per week during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) Visible emission notations of each coal transfer exhaust point shall be performed once per week during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (c) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (d) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (e) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (f) If abnormal emissions are observed, the Permittee shall take 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.

D.4.10 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) The Permittee shall record the pressure drop across each of the baghouses used in conjunction with the coal transfer drop points at least once per shift when coal is being transferred. When for any one reading, the pressure drop across baghouse CV1 or CV3 is outside the normal range of 4.0 and 10.0 inches of water or a range established during the latest stack test, or the pressure drop across baghouse CV2 is outside the normal range of 5.0 to 12.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, and shall be calibrated in accordance with the manufacturer's specifications. The specifications shall be available on site with the Preventive Maintenance Plan.

D.4.11 Broken or Failed Bag Detection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse-s pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

D.4.12 RotoClone Failure Detection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

In the event that RotoClone failure has been observed:

The failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.4.13 Record Keeping Requirements

- (a) To document compliance with conditions D.4.1, D.4.2, D.4.3, and D.4.9, the Permittee shall maintain records of the visible emission notations of the coal unloading and coal transfer exhaust points.
- (b) To document compliance with Condition D.4.10 the Permittee shall maintain records of the total static pressure drop across each baghouse.

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

D.4.14 Reporting Requirements

The Permittee shall furnish the Administrator a written report of the results of the initial performance tests for NSPS Subpart Y and any subsequent performance tests in accordance with 40 CFR 60.8.

SECTION D.5

FACILITY CONDITIONS

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

- (h) One (1) pneumatic ash handling system for fly ash and bottom ash from Boilers 1 and 2, identified as ASH Segment 1, with a maximum capacity of 14 tons per hour, installed in approximately 1960 and modified in 2002. Ash/particulate matter collected from the primary, secondary and tertiary (baghouse) collection units is transferred to the existing ash silo. Ash accumulated in this silo is removed via a water mixer into trucks. Particulate matter that passes through the tertiary (baghouse) filter is exhausted to stack ASH1 while air from the ash silo is directed to a final filter before exhausting to stack AB1. Ash/particulate matter is transported through the system by an electric vacuum pump.

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

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

D.5.1 PSD Minor Limit [326 IAC 2-2-1]

- (a) In order to make the requirements of 326 IAC 2-2-1(x) and 326 IAC 2-2-1(jj) (PSD Requirements) not applicable to the ash handling system identified as Ash Segment 1, the emissions from Ash Segment 1 shall be limited to less than twenty-five (25) tons of particulate matter (PM) per twelve (12) consecutive month period and less than fifteen (15) tons of PM₁₀ per twelve (12) consecutive month period. Compliance with these limits shall be determined at the end of each month.
- (b) Emissions from the ash handling equipment included in Ash Segment 1 shall be limited as follows:
- (1) Particulate matter (PM) emissions shall not exceed 5.7 pounds per hour.
 - (2) PM₁₀ emissions shall not exceed 3.4 pounds per hour.

D.5.2 Particulate [326 IAC 6-3-2]

Pursuant to Minor Source Mod 157-15659-00012, issued September 23, 2002, and 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the ash handling system identified as ASH Segment 1 shall not exceed 24.03 pounds per hour when operating at a process weight rate of 14 tons per hour.

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

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

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

D.5.3 Preventative Maintenance Plan [326 IAC 2-7-5(1)(13)]

A Preventative Maintenance Plan, in accordance with section C - Preventative Maintenance Plan, of this permit, is required for the one (1) pneumatic ash handling system and its emission control devices.

Compliance Determination Requirements

D.5.4 Particulate Control [326 IAC 2-7-10.5(d)(5)(C)]

Pursuant to Minor Source Mod 157-15659-00012, issued September 23, 2002:

- (a) The fresh water/mixing operation for the ash truck loading system shall be in operation and control the PM emissions from the ash at all times that the ash truck loading system is in operation.
- (b) The baghouse of ASH1 stack and air filter for AB1 stack for PM control, shall be in operation and control the PM emissions from ash system at all times that the ash storage and handling system is in operation.

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

D.5.5 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) Visible emission notations of the ASH1 and AB1 exhaust stacks shall be performed once per day during normal daylight operations and when the silo is receiving ash. A trained employee shall record whether emissions are normal or abnormal.
- (b) Visible emission notations of the ash truck loading system shall be performed once per day during normal daylight operations when the ash trucks are receiving ash. A trained employee shall record whether emissions are normal or abnormal.
- (c) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (d) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (e) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (f) If abnormal emissions are observed, the Permittee shall take 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.

D.5.6 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) The Permittee shall record the total static pressure drop across the baghouse and air filter controlling emissions from the ash handling system, at least once per day when the when the ash handling system is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 to 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, and shall be calibrated in accordance with the manufacturer's specifications. The specifications shall be available on site with the Preventive

Maintenance Plan.

D.5.7 Broken or Failed Bag Detection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse-s pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.5.8 Record Keeping Requirements

- (a) To document compliance with Conditions D.5.1, D.5.2, and D.5.5, the Permittee shall maintain records of the visible emission notations of the ash silo unloading station, and the baghouse stack exhaust.
- (b) To document compliance with Condition D.5.6, the Permittee shall maintain records of the total static pressure drop across each baghouse.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.6

FACILITY OPERATION CONDITIONS

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

- (i) One (1) pneumatic ash handling system for fly ash and bottom ash from Boiler 5, identified as ASH Segment 2, installed in 1991 and modified in 2002, exhausting to stacks ASH5A and ASH5B, with a maximum capacity of 20 tons/hr, with dust from ash transfer to the storage silo controlled by primary and secondary separator with tertiary baghouse filter. Ash is transferred from the silo to trucks at a maximum capacity of 300 tons/hr; dust is controlled by water mix, or by use of a telescoping spout with air displaced from the truck directed through a "filter module" with five canister filters which exhaust to the atmosphere through a vent, ASH 5C.

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

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

D.6.1 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the pneumatic ash handling system for Boiler 5 shall not exceed 30.5 pounds per hour when operating at a process weight rate of 20 tons per hour. The pounds per hour limitation was calculated using the following equation:

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

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

- (b) Pursuant to 326 IAC 6-3-2(e)(3) (Particulate Emission Limitations for Manufacturing Processes), for the ash unloading at the maximum throughput rate of 300 tons per hour, the concentration of particulate in the discharge gases to the atmosphere shall be less than 0.10 pounds per one thousand (1,000) pounds of gases.

D.6.2 Preventative Maintenance Plan [326 IAC 2-7-5(1)(13)]

A Preventative Maintenance Plan, in accordance with Section B - Preventative Maintenance Plan, of this permit, is required for the pneumatic ash handling system (for fly ash and bottom ash from Boiler 5) and its emission control devices.

Compliance Determination Requirements

D.6.3 Particulate Control [326 IAC 2-7-6(6)]

- (a) Except as otherwise provided by statute or rule or in this permit, in order to comply with Section C - Opacity and Condition D.6.1 (Particulate), the baghouse filters for particulate control shall be in operation and control emissions at all times that the associated ash handling is in operation; the telescoping spout shall be in operation and control emissions at all times that the dry ash loading system is in operation; and water shall be mixed with the ash at all times to control emissions when the wet process ash loading system.
- (b) Pursuant to Minor Source Modification 157-15996-00012, issued February 17, 2003, the filter module and canister filters for the dry ash loading system, for PM control shall be in operation and control the PM emissions at all times that the dry ash loading system is in operation.

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

D.6.4 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) Visible emission notations of the ASH5A and ASH5B exhaust stacks shall be performed once per day during normal daylight operations when transferring ash. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.6.5 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) The Permittee shall record the pressure drop across the ash silo baghouse at least once per day when the ash handling is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The Permittee shall record the pressure drop across the air filters controlling emissions from the dry ash truck loading system, at least once per day when the dry ash truck loading system is in operation. When for any one reading, the pressure drop across the air filter is outside the normal range of 1.0 and 7.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - to Excursions or Exceedances, shall be considered a deviation from this permit.
- (c) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, and shall be calibrated in accordance with the manufacturer's specifications. The specifications shall be available on site with the Preventive Maintenance Plan.

D.6.6 Broken or Failed Bag Detection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse-s pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.6.7 Record Keeping Requirements

- (a) To document compliance with Condition D.6.4, the Permittee shall maintain records of the visible emission notations of the ASH5A and ASH5B exhaust stacks and the exhaust vent ASH 5C.
- (b) To document compliance with Condition D.6.5, the Permittee shall maintain records of the pressure drop across each baghouse.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.7

FACILITY OPERATION CONDITIONS

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

- (j) Material handling for the limestone injection system for Boiler 5, including pneumatic conveyance from truck to bulk storage in a silo outside or to a "day bin" inside the plant at an offload rate of approximately 12.5 tons per hour; gravity fed from day bin into the boiler. Particulate emissions are controlled by a baghouse on the silo and filter cartridges on the day bin. The feed rate of limestone to the boiler varies depending on the sulfur content of the coal being fired; the average feed rate is 1 ton per hour, and the maximum rate is approximately 5 tons/hour.

Insignificant Activity:

Covered conveyors for limestone conveying of less than or equal to 7,200 tons per day for sources other than mineral processing plants constructed after August 31, 1983.

(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 [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the limestone handling system shall not exceed 22.2 pounds per hour when operating at a process weight rate of 12.5 tons per hour. This pounds per hour limitation was calculated using the following equation:

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

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

D.7.2 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 limestone injection system for Boiler 5 and any emission control devices.

Compliance Determination Requirements

D.7.3 Particulate Control [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule or in this permit, the baghouse and filter cartridges for PM control shall be in operation and control emissions at all times the associated limestone transfer points are in operation.

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

D.7.4 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) Visible emission notations of the limestone handling system exhaust points shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or

expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.7.5 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) The Permittee shall record the pressure drop across the baghouse used in conjunction with the limestone storage silo at least once per day when limestone is being transferred into the silo. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 7.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, and shall be calibrated in accordance with the manufacturer's specifications. The specifications shall be available on site with the Preventive Maintenance Plan.

D.7.6 Broken or Failed Bag Detection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse-s pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.7.7 Record Keeping Requirements

- (a) To document compliance with Condition D.7.4, the Permittee shall maintain records of the visible emission notations of the limestone exhaust vents.

- (b) To document compliance with Condition D.7.5, the Permittee shall maintain records of the pressure drop across each baghouse.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.8

FACILITY OPERATION CONDITIONS

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

- (k) One (1) 6.5 MMBtu/hr natural gas fired dual chamber animal carcass incinerator, identified as ADDL, installed in 1991, with an 800 lb/hr waste capacity, exhausting to stack PUADDL1.

Insignificant Activities:

- (1) One (1) No. 2 fuel oil fired poultry incinerator, installed in 2007, with an afterburner and a 70 lb/hr waste capacity, located at the animal sciences farm, 5675 W 600 N, West Lafayette, Indiana;
- (2) One (1) No. 2 fuel oil fired animal carcass incinerator for swine, installed in 1991 or 1992, with an afterburner and a 100 lb/hr waste capacity, located at the animal sciences farm, 5675 W 600 N, West Lafayette, Indiana;
- (3) One (1) natural gas fired incinerator identified as RAD1, installed in 1986, with primary and secondary chambers and a 50 lb/hr waste capacity, for burning laboratory waste and non-infectious biological material contaminated with low level radioactivity, located at the By-Product Material Storage Building North (BMSN).
- (4) One (1) natural gas fired incinerator identified as RAD2, installed in 1996, with an afterburner and a 50 lb/hr waste capacity, for burning laboratory waste and non-infectious biological material contaminated with low level radioactivity, located at the By-Product Material Storage Building North (BMSN).

(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 Incinerators [326 IAC 4-2-2]

- (a) Pursuant to 326 IAC 4-2-2 (Incinerators), all incinerators shall comply with the following requirements:
- (1) Consist of primary and secondary chambers or the equivalent.
- (2) Be equipped with a primary burner unless burning only wood products.
- (3) Comply with 326 IAC 5-1 and 326 IAC 2.
- (4) Be maintained, operated, and burn waste in accordance with the manufacturer's specifications or an operation and maintenance plan as specified in subsection (c).
- (5) Not emit particulate matter in excess of one (1) of the following:
- (A) For RAD1, with a 250 lb/hr waste capacity:
- Three-tenths (0.3) pound of particulate matter per one thousand (1,000) pounds of dry exhaust gas under standard conditions corrected to fifty percent (50%) excess air.
- (B) For the swine incinerator with a 100 lb/hr waste capacity, the poultry

incinerator with a 70 lb/hr waste capacity, and RAD2 with a 50 lb/hr waste capacity:

Five-tenths (0.5) pound of particulate matter per one thousand (1,000) pounds of dry exhaust gas under standard conditions corrected to fifty percent (50%) excess air for incinerators with solid waste capacity less than two hundred (200) pounds per hour.

- (6) If any of the requirements of subdivisions (1) through (5) are not met, then the owner or operator shall stop charging the incinerator until adjustments are made that address the underlying cause of the deviation.
- (b) An incinerator is exempt from subsection (a)(5) if subject to a more stringent particulate matter emission limit in 40 CFR 52 Subpart P*, State Implementation Plan for Indiana.
- (c) An owner or operator developing an operation and maintenance plan pursuant to subsection (a)(4) must comply with the following:
 - (1) The operation and maintenance plan must be designed to meet the particulate matter emission limitation specified in subsection (a)(5) and include the following:
 - (A) Procedures for receiving, handling, and charging waste.
 - (B) Procedures for incinerator startup and shutdown.
 - (C) Procedures for responding to a malfunction.
 - (D) Procedures for maintaining proper combustion air supply levels.
 - (E) Procedures for operating the incinerator and associated air pollution control systems.
 - (F) Procedures for handling ash.
 - (G) A list of wastes that can be burned in the incinerator.
 - (2) Each incinerator operator shall review the plan before initial implementation of the operation and maintenance plan and annually thereafter.
 - (3) The operation and maintenance plan must be readily accessible to incinerator operators.
 - (4) The owner or operator of the incinerator shall notify the department, in writing, thirty (30) days after the operation and maintenance plan is initially developed pursuant to this section.
- (d) The owner or operator of the incinerator must make the manufacturer's specifications or the operation and maintenance plan available to the department upon request.

D.8.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any emission control devices.

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

D.8.3 Record Keeping Requirements

- (a) To document compliance with Condition D.8.2, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.9

FACILITY OPERATION CONDITIONS

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

- (l) One (1) 17.7 MMBtu/hr no. 2 fuel oil fired Black Start electric generator, identified as BSG, exhausting through stack BSG-1, with a fuel limit of 113,000 gallons per year.

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

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

D.9.1 Source Modification Limits [326 IAC 2-7-10.5(d)(5)(D)] [326 IAC 2-2-1]

- (a) Pursuant to 326 IAC 2-7-10.5(d)(5) (Source Modifications), the potential to emit of nitrogen oxides (NO_x) from the Black Start generator shall be limited to less than 25 tons per year, as follows:
- (1) The input of No. 2 fuel oil to the generator, BSG, shall be limited to less than 113,000 gallons per 12 consecutive month period, with compliance determined at the end of each month.
 - (2) NO_x emissions shall not exceed 3.2 lb/MMBtu.
- (b) Compliance with this limit makes 326 IAC 2-7-10.5(f), (g), and (h) ("Significant Source Modifications") not applicable to this modification.
- (c) Compliance with this limit also makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-1.1-4 (Federal Provisions) not applicable to this modification.

D.9.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this approval, is required for Black Start electric generator, identified as BSG.

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

D.9.3 Record Keeping Requirements

- (a) Pursuant to Minor Source Modification 157-10906-00012, issued August 27, 1999, to document compliance with Condition D.9.1, the Permittee shall maintain records in accordance with (1) through (6) below.
- (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fuel oil usage since last compliance determination period and equivalent nitrogen oxides (NO_x) 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
 - (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) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.9.4 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.9.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this approval, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.10

FACILITY OPERATION CONDITIONS

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

Insignificant Activities:

Boilers using the following fuels:

- (A) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, including three (3) natural gas fired Aviation Tech Building Boilers with low-NO_x combustion systems, installed in 2000, each with 2.8 MMBtu/hr heat input capacity, identified as AV Tech Boiler 1, AV Tech Boiler 2, and AV Tech Boiler 3.
- (B) Propane or liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.
- (C) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.

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

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

D.10.1 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating: Emission Limitations for Facilities Specified in 326 IAC 6-2-1(d)), the PM emissions from each of the boilers classified as an insignificant activity shall not exceed 0.1 pound per million Btu heat input (lb/MMBtu).

SECTION D.11

FACILITY OPERATION CONDITIONS

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

- (m) Two (2) portable pumps powered by 350 HP no. 2 diesel fueled engines and mounted on tri-axle trailers, located at the Animal Sciences Research and Education Center, operated intermittently (approximately 500 hours per year each), used for pumping lagoon material to the spray irrigation system and to transfer material from one lagoon to another.

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

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

D.11.1 Sulfur Dioxide Emission Limitations [326 IAC 7-1.1]

Pursuant to Minor Source Modification 157-15944-00012, issued October 21, 2002, and 326 IAC 7-1.1-2, the sulfur dioxide emissions from fuel combustion facilities shall not exceed five-tenths (0.5) pound per million Btu for distillate oil combustion.

Compliance Determination Requirements

D.11.2 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-1.1-2]

Compliance with Condition D.11.1 shall be determined utilizing one of the following options:

- (a) Pursuant to 326 IAC 7-2-1(c), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the equivalent of five-tenths (0.5) pound per million Btu heat input.
- (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 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.

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

D.11.3 Record Keeping Requirements

- (a) To document compliance with the requirements in Conditions D.11.1 and D.11.2, the Permittee shall maintain records of all fuel sampling and analysis data, pursuant to 326 IAC 7-2. Records shall be complete and sufficient to establish compliance with the SO₂ limit in Condition D.11.1.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.12

FACILITY OPERATION CONDITIONS

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

Insignificant Activities [326 IAC 2-7-1(21)]:

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

Cleaners and solvents characterized as follows: [326 IAC 8-3]

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

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

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

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

D.12.1 Organic Solvent Degreasing Operations: Cold Cleaner Operation [326 IAC 8-3-2]

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

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.12.2 Organic Solvent Degreasing Operations: Cold Cleaner Degreaser Operation and Control [326 IAC 8-3-5]

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs, constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch)

measured at thirty-eight degrees Celsius (38^oC) (one hundred degrees Fahrenheit (100^oF));

- (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^oC) (one hundred degrees Fahrenheit (100^oF)), 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^oC) (one hundred degrees Fahrenheit (100^oF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^oC) (one hundred twenty degrees Fahrenheit (120^oF)):
 - (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 construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

SECTION D.13

FACILITY OPERATION CONDITIONS

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

Insignificant Activities:

The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.

Furnaces used for melting metals other than beryllium with a brim full capacity of less than or equal to 450 cubic inches by volume.

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.

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

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

D.13.1 Particulate [326 IAC 6-3-2] [40 CFR 52 Subpart P]

- (a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- (b) 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. This condition is not federally enforceable.
- (c) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the brazing, cutting, soldering, welding, melt furnace(s), grinding, and machining operations shall not exceed an amount determined by the following, for a process weight rate equal to or greater than 100 pounds per hour:

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

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

D.13.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any emission control devices.

Compliance Determination Requirement

D.13.3 Particulate Control [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule or in this permit, the particulate control shall be in

operation and control emissions from the grinding and machining operations at all times that the associated process is in operation.

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

D.13.4 Record Keeping Requirements

- (a) To document compliance with Condition D.13.2, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.14

FACILITY OPERATION CONDITIONS

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

- (a) One (1) spreader stoker coal fired boiler, identified as Boiler 1, with installation completed in 1960, with a maximum capacity of 281 MMBtu/hr, with a multi-cyclone collector and an electrostatic precipitator for particulate matter control, exhausting to stack WADE 01. Boiler 1 has two (2) auxiliary natural gas fired burners rated at 35 MMBtu/hr per burner, used for ignition and flame stabilization periods. Boiler 1 has a continuous emissions monitoring system (CEMS) for nitrogen oxides (NO_x) and a continuous opacity monitor (COM).

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR 63, Subpart DDDDD), Boiler 1 is considered an existing affected source. Boiler 1 is categorized under the large solid fuel subcategory.

- (b) One (1) spreader stoker coal fired boiler, identified as Boiler 2, with installation completed in 1967, with a maximum capacity of 274 MMBtu/hr, with a multi-cyclone collector and an electrostatic precipitator or a multi-compartment baghouse for particulate matter control, exhausting to stack WADE 02. Boiler 2 has two (2) auxiliary natural gas fired burners rated at 35 MMBtu/hr per burner, used for ignition and flame stabilization periods. Boiler 2 has a continuous emissions monitoring system (CEMS) for nitrogen oxides (NO_x) and a continuous opacity monitor (COM).

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR 63, Subpart DDDDD), Boiler 2 is considered an existing affected source. Boiler 2 is categorized under the large solid fuel subcategory.

- (c) One (1) circulating fluidized bed coal fired boiler, identified as Boiler 5, with installation started in 1989 and completed in 1991, with a design capacity of 279 MMBtu/hr, with a baghouse for particulate matter control and limestone injection for sulfur dioxide control, combusting natural gas for ignition, exhausting to stack WADE 05. Boiler 5 has continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and a continuous opacity monitor (COM).

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR 63, Subpart DDDDD), Boiler 5 is considered an existing affected source. Boiler 5 is categorized under the large solid fuel subcategory.

Under the Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units NSPS (40 CFR 60, Subpart Db), Boiler 5 is considered an affected source.

- (d) One (1) natural gas and distillate fuel oil fired boiler, identified as Boiler 3, with installation started in 1973 or 1974 and completed in 1974, with a maximum capacity of 163,000 pounds of steam/216 MMBtu/hr, exhausting to stack WADE 03. Boiler 3 has a continuous emissions monitoring system (CEMS) for nitrogen oxides (NO_x).

Under the Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units NSPS (40 CFR 60, Subpart D), Boiler 3 is considered an affected source.

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

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

D.14.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

- (a) Pursuant to 40 CFR 63.7565, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the Boilers 1, 2, 3, and 5, as specified in Table 10 of 40 CFR 63, Subpart DDDDD in accordance with schedule in 40 CFR 63 Subpart DDDDD.
- (b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

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

and

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

D.14.2 Applicability of Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP Requirements [40 CFR Part 63, Subpart DDDDD]

The provisions of 40 CFR Part 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters) apply to the affected source. A copy of this rule is available on the US EPA Air Toxics Website at www.epa.gov/ttn/atw/boiler/boilerpg.html.

D.14.3 Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP Requirements [40 CFR Part 63, Subpart DDDDD]

Pursuant to CFR Part 63, Subpart DDDDD, the Permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters for the Boilers 1, 2, and 5, as specified as follows on and after the initial compliance date, September 13, 2008, in accordance with IDEM OAQ's approval issued on October 19, 2006.

Boiler # 3 is subject only to the initial notification requirements of 40 CFR 63.7545 because it is a large existing boiler (installed in 1974) that utilizes only gas or distillate fuel oil.

§ 63.7480 What is the purpose of this subpart?

This subpart establishes national emission limits and work practice standards for hazardous air pollutants (HAP) emitted from industrial, commercial, and institutional boilers and process heaters. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limits and work practice standards.

§ 63.7485 Am I subject to this subpart?

You are subject to this subpart if you own or operate an industrial, commercial, or institutional boiler or process heater as defined in §63.7575 that is located at, or is part of, a major source of HAP as defined in

§63.2 or §63.761 (40 CFR part 63, subpart HH, National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities), except as specified in §63.7491.

§ 63.7490 What is the affected source of this subpart?

(a) This subpart applies to new, reconstructed, or existing affected sources as described in paragraphs (a)(1) and (2) of this section.

(1) The affected source of this subpart is the collection of all existing industrial, commercial, and institutional boilers and process heaters within a subcategory located at a major source as defined in §63.7575.

(2) The affected source of this subpart is each new or reconstructed industrial, commercial, or institutional boiler or process heater located at a major source as defined in §63.7575.

(b) A boiler or process heater is new if you commence construction of the boiler or process heater after January 13, 2003, and you meet the applicability criteria at the time you commence construction.

(c) A boiler or process heater is reconstructed if you meet the reconstruction criteria as defined in §63.2, you commence reconstruction after January 13, 2003, and you meet the applicability criteria at the time you commence reconstruction.

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

§ 63.7491 Are any boilers or process heaters not subject to this subpart?

The types of boilers and process heaters listed in paragraphs (a) through (o) of this section are not subject to this subpart.

(a) A municipal waste combustor covered by 40 CFR part 60, subpart AAAA, subpart BBBB, subpart Cb or subpart Eb.

(b) A hospital/medical/infectious waste incinerator covered by 40 CFR part 60, subpart Ce or subpart Ec.

(c) An electric utility steam generating unit that is 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.

(d) A boiler or process heater required to have a permit under section 3005 of the Solid Waste Disposal Act or covered by 40 CFR part 63, subpart EEE (e.g., hazardous waste boilers).

(e) A commercial and industrial solid waste incineration unit covered by 40 CFR part 60, subpart CCCC or subpart DDDD.

(f) A recovery boiler or furnace covered by 40 CFR part 63, subpart MM.

(g) A boiler or process heater that is used specifically for research and development. This does not include units that only provide heat or steam to a process at a research and development facility.

(h) A hot water heater as defined in this subpart.

(i) A refining kettle covered by 40 CFR part 63, subpart X.

(j) An ethylene cracking furnace covered by 40 CFR part 63, subpart YY.

(k) Blast furnace stoves as described in the EPA document, entitled "National Emission Standards for Hazardous Air Pollutants (NESHAP) for Integrated Iron and Steel Plants—Background Information for Proposed Standards," (EPA-453/R-01-005).

(l) Any boiler and process heater specifically listed as an affected source in another standard(s) under 40 CFR part 63.

(m) Any boiler and process heater specifically listed as an affected source in another standard(s) established under section 129 of the Clean Air Act (CAA).

(n) Temporary boilers as defined in this subpart.

(o) Blast furnace gas fuel-fired boilers and process heaters as defined in this subpart.

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

(a) If you have a new or reconstructed boiler or process heater, you must comply with this subpart by November 12, 2004 or upon startup of your boiler or process heater, whichever is later.

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

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, paragraphs (c)(1) and (2) of this section apply to you.

(1) Any new or reconstructed boiler or process heater at the existing facility must be in compliance with this subpart upon startup.

(2) Any existing boiler or process heater at the existing facility must be in compliance with this subpart within 3 years after the facility becomes a major source.

(d) You must meet the notification requirements in §63.7545 according to the schedule in §63.7545 and in subpart A of this part. Some of the notifications must be submitted before you are required to comply with the emission limits and work practice standards in this subpart.

§ 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.

§ 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).

§ 63.7506 Do any boilers or process heaters have limited requirements?

(b) The affected boilers and process heaters listed in paragraphs (b)(1) through (3) of this section are subject to only the initial notification requirements in §63.9(b) (i.e., they are not subject to the emission limits, work practice standards, performance testing, monitoring, SSMP, site-specific monitoring plans,

recordkeeping and reporting requirements of this subpart or any other requirements in subpart A of this part).

- (1) Existing large and limited use gaseous fuel units.
- (2) Existing large and limited use liquid fuel units.

§ 63.7507 What are the health-based compliance alternatives for the hydrogen chloride (HCl) and total selected metals (TSM) standards?

(a) As an alternative to the requirement to demonstrate compliance with the HCl emission limit in table 1 to this subpart, you may demonstrate eligibility for the health-based compliance alternative for HCl emissions under the procedures prescribed in appendix A to this subpart.

(b) As an alternative to the requirement to demonstrate compliance with the TSM emission limit in table 1 to this subpart based on the sum of emissions for the eight selected metals, you may demonstrate eligibility for the health-based alternative for manganese emissions under the procedures prescribed in appendix A to this subpart and comply with the TSM emission standards in table 1 based on the sum of emissions for seven selected metals (by excluding manganese emissions from the summation of TSM emissions).

§ 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.

(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.

§ 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.

(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) 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.
- (c) You may average particulate matter or TSM, HCl, and mercury emissions from existing large solid fuel boilers to demonstrate compliance with the limits in Table 1 to this subpart if you satisfy the requirements in paragraphs (d), (e), and (f) of this section.
- (d) The weighted average emissions 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 paragraphs (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.

$$\text{AveWeighted Emissions} = \frac{\sum_{i=1}^n (Er \times Hm)}{\sum_{i=1}^n Hm} \quad (\text{Eq. 1})$$

Where:

AveWeighted = 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 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 can 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.

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

Where:

AveWeighted = 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 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 12-month rolling average basis determined at the end of every month (12 times per year) according to paragraphs (f)(1) and (2). The first 12-month rolling-average 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 12-month rolling average weighted emission limit using the actual heat capacity for each existing large solid fuel boiler participating in the emissions averaging option.

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

Where:

AveWeighted Emissions = 12-month rolling 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, 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 can use Equation 4 of this section as an alternative to using Equation 3 of this section to calculate the 12-month rolling average weighted emission limit using the actual steam generation from the large solid fuel boilers participating in the emissions averaging option.

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

Where:

AveWeighted Emissions = 12-month rolling average weighted emission level for PM or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

E_r = Emission rate, 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.

S_a = Actual steam generation for each calendar month by boiler, i , in units of pounds.

C_f = Conversion factor, as calculated during the most recent compliance test, in units of million Btu of heat input per pounds of steam generated.

(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.

§ 63.7525 What are my monitoring, installation, operation, and maintenance requirements?

(a) If you have an applicable work practice standard for carbon monoxide, and your boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 MMBtu per hour or greater, you must install, operate, and maintain a continuous emission monitoring system (CEMS) for carbon monoxide according to the procedures in paragraphs (a)(1) through (6) of this section by the compliance date specified in §63.7495.

(1) Each CEMS must be installed, operated, and maintained according to Performance Specification (PS) 4A of 40 CFR part 60, appendix B, and according to the site-specific monitoring plan developed according to §63.7505(d).

(2) You must conduct a performance evaluation of each CEMS according to the requirements in §63.8 and according to PS 4A of 40 CFR part 60, appendix B.

(3) Each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(4) The CEMS data must be reduced as specified in §63.8(g)(2).

(5) You must calculate and record a 30-day rolling average emission rate on a daily basis. A new 30-day rolling average emission rate is calculated as the average of all of the hourly CO emission data for the preceding 30 operating days.

(6) For purposes of calculating data averages, you must not use data recorded during periods of monitoring malfunctions, associated repairs, out-of-control periods, required quality assurance or control activities, or when your boiler or process heater is operating at less than 50 percent of its rated capacity. You must use all the data collected during all other periods in assessing compliance. Any period for which the monitoring system is out of control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

(b) If you have an applicable opacity operating limit, you must install, operate, certify and maintain each continuous opacity monitoring system (COMS) according to the procedures in paragraphs (b)(1) through (7) of this section by the compliance date specified in §63.7495.

(1) Each COMS must be installed, operated, and maintained according to PS 1 of 40 CFR part 60, appendix B.

(2) You must conduct a performance evaluation of each COMS according to the requirements in §63.8 and according to PS 1 of 40 CFR part 60, appendix B.

(3) As specified in §63.8(c)(4)(i), each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(4) The COMS data must be reduced as specified in §63.8(g)(2).

(5) You must include in your site-specific monitoring plan procedures and acceptance criteria for operating and maintaining each COMS according to the requirements in §63.8(d). At a minimum, the monitoring plan must include a daily calibration drift assessment, a quarterly performance audit, and an annual zero alignment audit of each COMS.

(6) You must operate and maintain each COMS according to the requirements in the monitoring plan and the requirements of §63.8(e). Identify periods the COMS is out of control including any periods that the COMS fails to pass a daily calibration drift assessment, a quarterly performance audit, or an annual zero alignment audit.

(7) You must determine and record all the 6-minute averages (and 1-hour block averages as applicable) collected for periods during which the COMS is not out of control.

(c) If you have an operating limit that requires the use of a CMS, you must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the procedures in paragraphs (c)(1) through (5) of this section by the compliance date specified in §63.7495.

(1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data.

(2) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must conduct all monitoring in continuous operation at all times that the unit is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(3) For purposes of calculating data averages, you must not use data recorded during monitoring malfunctions, associated repairs, out of control periods, or required quality assurance or control activities. You must use all the data collected during all other periods in assessing compliance. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

(4) Determine the 3-hour block average of all recorded readings, except as provided in paragraph (c)(3) of this section.

(5) Record the results of each inspection, calibration, and validation check.

(d) If you have an operating limit that requires the use of a flow measurement device, you must meet the requirements in paragraphs (c) and (d)(1) through (4) of this section.

(1) Locate the flow sensor and other necessary equipment in a position that provides a representative flow.

(2) Use a flow sensor with a measurement sensitivity of 2 percent of the flow rate.

(3) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(4) Conduct a flow sensor calibration check at least semiannually.

(e) If you have an operating limit that requires the use of a pressure measurement device, you must meet the requirements in paragraphs (c) and (e)(1) through (6) of this section.

(1) Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure.

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(3) Use a gauge with a minimum tolerance of 1.27 centimeters of water or a transducer with a minimum tolerance of 1 percent of the pressure range.

- (4) Check pressure tap pluggage daily.
- (5) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.
- (6) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.
- (f) If you have an operating limit that requires the use of a pH measurement device, you must meet the requirements in paragraphs (c) and (f)(1) through (3) of this section.
 - (1) Locate the pH sensor in a position that provides a representative measurement of scrubber effluent pH.
 - (2) Ensure the sample is properly mixed and representative of the fluid to be measured.
 - (3) Check the pH meter's calibration on at least two points every 8 hours of process operation.
- (g) If you have an operating limit that requires the use of equipment to monitor voltage and secondary current (or total power input) of an electrostatic precipitator (ESP), you must use voltage and secondary current monitoring equipment to measure voltage and secondary current to the ESP.
- (h) If you have an operating limit that requires the use of equipment to monitor sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), you must meet the requirements in paragraphs (c) and (h)(1) through (3) of this section.
 - (1) Locate the device in a position(s) that provides a representative measurement of the total sorbent injection rate.
 - (2) Install and calibrate the device in accordance with manufacturer's procedures and specifications.
 - (3) At least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.
- (i) If you elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (i)(1) through (8) of this section.
 - (1) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.
 - (2) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with the guidance provided in EPA-454/R-98-015, September 1997.
 - (3) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less.
 - (4) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.
 - (5) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
 - (6) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
 - (7) For positive pressure fabric filter systems that do not duct all compartments of cells to a common stack, a bag leak detection system must be installed in each baghouse compartment or cell.

(8) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

§ 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.

(i) For a wet scrubber, you must establish the minimum scrubber effluent pH, liquid flowrate, and pressure drop as defined in §63.7575, as your operating limits during the three-run performance test. If you use a wet scrubber and you conduct separate performance tests for particulate matter, HCl, and mercury emissions, you must establish one set of minimum scrubber effluent pH, liquid flowrate, and pressure drop operating limits. The minimum scrubber effluent pH operating limit must be established during the HCl

performance test. If you conduct multiple performance tests, you must set the minimum liquid flowrate and pressure drop operating limits at the highest minimum values established during the performance tests.

(ii) For an electrostatic precipitator, you must establish the minimum voltage and secondary current (or total power input), as defined in §63.7575, as your operating limits during the three-run performance test.

(iii) For a dry scrubber, you must establish the minimum sorbent injection rate, as defined in §63.7575, as your operating limit during the three-run performance test.

(iv) The operating limit for boilers or process heaters with fabric filters that choose to demonstrate continuous compliance through bag leak detection systems is that a bag leak detection system be installed according to the requirements in §63.7525, and that each fabric filter must be operated such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month period.

(d) If you elect to demonstrate compliance with an applicable emission limit through fuel analysis, you must conduct fuel analyses according to §63.7521 and follow the procedures in paragraphs (d)(1) through (5) of this section.

(1) If you burn more than one fuel type, you must determine the fuel mixture you could burn in your boiler or process heater that would result in the maximum emission rates of the pollutants that you elect to demonstrate compliance through fuel analysis.

(2) You must determine the 90th percentile confidence level fuel pollutant concentration of the composite samples analyzed for each fuel type using the one-sided z-statistic test described in Equation 8 of this section.

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

Where:

P_{90} = 90th percentile confidence level pollutant concentration, in pounds per million Btu.

mean = Arithmetic average of the fuel pollutant concentration in the fuel samples analyzed according to §63.7521, in units of pounds per million Btu.

SD = Standard deviation of the pollutant concentration in the fuel samples analyzed according to §63.7521, in units of pounds per million Btu.

t = t distribution critical value for 90th percentile (0.1) probability for the appropriate degrees of freedom (number of samples minus one) as obtained from a Distribution Critical Value Table.

(3) To demonstrate compliance with the applicable emission limit for HCl, the HCl emission rate that you calculate for your boiler or process heater using Equation 9 of this section must be less than the applicable emission limit for HCl.

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

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).

§ 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 type or a new mixture of fuels, you must recalculate the maximum chlorine input using Equation 5 of §63.7530. If the results of recalculating the maximum chlorine input using Equation 5 of §63.7530 are higher than the maximum chlorine input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the HCl emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(c).

(5) If you demonstrate compliance with an applicable TSM emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the TSM emission rate using Equation 10 of §63.7530 according to the procedures specified in paragraphs (a)(5)(i) through (iii) of this section.

(i) You must determine the TSM concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of TSM.

(iii) Recalculate the TSM emission rate from your boiler or process heater under these new conditions using Equation 10 of §63.7530. The recalculated TSM emission rate must be less than the applicable emission limit.

(6) If you demonstrate compliance with an applicable TSM emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum TSM input using Equation 6 of §63.7530. If the results of recalculating the maximum total selected metals input using Equation 6 of §63.7530 are higher than the maximum TSM input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the TSM emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(c).

(7) If you demonstrate compliance with an applicable mercury emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the mercury emission rate using Equation 11 of §63.7530 according to the procedures specified in paragraphs (a)(7)(i) through (iii) of this section.

(i) You must determine the mercury concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of mercury.

(iii) Recalculate the mercury emission rate from your boiler or process heater under these new conditions using Equation 11 of §63.7530. The recalculated mercury emission rate must be less than the applicable emission limit.

(8) If you demonstrate compliance with an applicable mercury emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum mercury input using Equation 7 of §63.7530. If the results of recalculating the maximum mercury input using Equation 7 of §63.7530 are higher than the maximum mercury input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the mercury emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(c).

(9) If your unit is controlled with a fabric filter, and you demonstrate continuous compliance using a bag leak detection system, you must initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions as soon as practical, and operate and maintain the fabric filter system such that the alarm does not sound more than 5 percent of the operating time during a 6-month period. You must also keep records of the date, time, and duration of each alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken. You must also record the percent of the operating time during each 6-month period that the alarm sounds. In calculating this operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If you take longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken to initiate corrective action.

(10) If you have an applicable work practice standard for carbon monoxide, and you are required to install a CEMS according to §63.7525(a), then you must meet the requirements in paragraphs (a)(10)(i) through (iii) of this section.

- (i) You must continuously monitor carbon monoxide according to §§63.7525(a) and 63.7535.
- (ii) Maintain a carbon monoxide emission level below your applicable carbon monoxide work practice standard in Table 1 to this subpart at all times except during periods of startup, shutdown, malfunction, and when your boiler or process heater is operating at less than 50 percent of rated capacity.
- (iii) Keep records of carbon monoxide levels according to §63.7555(b).
- (b) You must report each instance in which you did not meet each emission limit, operating limit, and work practice standard in Tables 1 through 4 to this subpart that apply to you. You must also report each instance during a startup, shutdown, or malfunction when you did not meet each applicable emission limit, operating limit, and work practice standard. These instances are deviations from the emission limits and work practice standards in this subpart. These deviations must be reported according to the requirements in §63.7550.
- (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).

§ 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 (4) 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) For each existing solid fuel boiler participating in the emissions averaging option that is equipped with a dry control system, maintain opacity at or below the applicable limit;
 - (3) For each existing solid fuel boiler participating in the emissions averaging option that is equipped with a wet scrubber, maintain the 3-hour average parameter values at or below the operating limits established during the most recent performance test; and
 - (4) For each existing solid fuel boiler participating in the emissions averaging option that has an approved alternative operating plan, maintain the 3-hour average parameter values at or below the operating limits established in the most recent performance test.
- (b) Any instance where the owner or operator fails to comply with the continuous monitoring requirements in paragraphs (a)(1) through (4) of this section, except during periods of startup, shutdown, and malfunction, is a deviation.

§ 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.

(d) For each deviation from an emission limit or operating limit in this subpart and for each deviation from the requirements for work practice standards in this subpart that occurs at an affected source where you are not using a CMSs to comply with that emission limit, operating limit, or work practice standard, the compliance report must contain the information in paragraphs (c)(1) through (10) of this section and the information required in paragraphs (d)(1) through (4) of this section. This includes periods of startup, shutdown, and malfunction.

(1) The total operating time of each affected source during the reporting period.

(2) A description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated.

(3) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.

(4) A copy of the test report if the annual performance test showed a deviation from the emission limit for particulate matter or the alternative TSM limit, a deviation from the HCl emission limit, or a deviation from the mercury emission limit.

(e) For each deviation from an emission limitation and operating limit or work practice standard in this subpart occurring at an affected source where you are using a CMS to comply with that emission limit, operating limit, or work practice standard, you must include the information in paragraphs (c) (1) through (10) of this section and the information required in paragraphs (e) (1) through (12) of this section. This includes periods of startup, shutdown, and malfunction and any deviations from your site-specific monitoring plan as required in §63.7505(d).

(1) The date and time that each malfunction started and stopped and description of the nature of the deviation (*i.e.*, what you deviated from).

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out of control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMSs downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

(8) An identification of each parameter that was monitored at the affected source for which there was a deviation, including opacity, carbon monoxide, and operating parameters for wet scrubbers and other control devices.

(9) A brief description of the source for which there was a deviation.

(10) A brief description of each CMS for which there was a deviation.

(11) The date of the latest CMS certification or audit for the system for which there was a deviation.

(12) A description of any changes in CMSs, processes, or controls since the last reporting period for the source for which there was a deviation.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 9 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

§ 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.

§ 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.

§ 63.7565 What parts of the General Provisions apply to me?

Table 10 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§ 63.7570 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities listed in paragraphs (b)(1) through (5) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency, however, the U.S. EPA retains oversight of this subpart and can take enforcement actions, as appropriate.

(1) Approval of alternatives to the non-opacity emission limits and work practice standards in §63.7500(a) and (b) under §63.6(g).

(2) Approval of alternative opacity emission limits in §63.7500(a) under §63.6(h)(9).

(3) Approval of major change to test methods in Table 5 to this subpart under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(4) Approval of major change to monitoring under §63.8(f) and as defined in §63.90.

(5) Approval of major change to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

§ 63.7575 What definitions apply to this subpart?

Terms used in this subpart are defined in the CAA, in §63.2 (the General Provisions), and in this section as follows:

Annual capacity factor means the ratio between the actual heat input to a boiler or process heater from the fuels burned during a calendar year, and the potential heat input to the boiler or process heater had it been operated for 8,760 hours during a year at the maximum steady state design heat input capacity.

Bag leak detection system means an instrument that is capable of monitoring particulate matter loadings in the exhaust of a fabric filter (*i.e.*, baghouse) in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on electrodynamic, triboelectric, light scattering, light transmittance, or other principle to monitor relative particulate matter loadings.

Biomass fuel means unadulterated wood as defined in this subpart, wood residue, and wood products (*e.g.*, trees, tree stumps, tree limbs, bark, lumber, sawdust, sanderdust, chips, scraps, slabs, millings, and shavings); animal litter; vegetative agricultural and silvicultural materials, such as logging residues (slash), nut and grain hulls and chaff (*e.g.*, almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds.

Blast furnace gas fuel-fired boiler or process heater means an industrial/commercial/institutional boiler or process heater that receives 90 percent or more of its total heat input (based on an annual average) from blast furnace gas.

Boiler means an enclosed device using controlled flame combustion and having the primary purpose of recovering thermal energy in the form of steam or hot water. Waste heat boilers are excluded from this definition.

Coal means all solid fuels classifiable as anthracite, bituminous, sub-bituminous, or lignite by the American Society for Testing and Materials in ASTM D388–991. ¹, “Standard Specification for Classification of Coals by Rank ¹” (incorporated by reference, see §63.14(b)), coal refuse, and petroleum coke. Synthetic fuels derived from coal for the purpose of creating useful heat including but not limited to, solvent-refined coal, coal-oil mixtures, and coal-water mixtures, for the purposes of this subpart. Coal derived gases are excluded from this definition.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (6,000 Btu per pound) on a dry basis.

Commercial/institutional boiler means a boiler used in commercial establishments or institutional establishments such as medical centers, research centers, institutions of higher education, hotels, and laundries to provide electricity, steam, and/or hot water.

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.

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 in which hot gases of combustion pass through the tubes and water contacts the outside surfaces of the tubes.

Fossil fuel means natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such materials.

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.

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 or gas supply emergencies, has a rated capacity of greater than 10 MMBtu per hour heat input, and has an annual capacity factor of greater than 10 percent.

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 has an annual capacity factor of greater than 10 percent. Large 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.

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 has an annual capacity factor of greater 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 firetube boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment or gas supply emergencies, and any boiler or process heater that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment or gas supply emergencies, and has a rated capacity of less than or equal to 10 MMBtu per hour heat input.

Small liquid fuel subcategory includes any firetube boiler that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, and any boiler or process heater that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, and has a rated capacity of less than or equal to 10 MMBtu per hour heat input. Small 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.

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.

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 in which water passes through the tubes and hot gases of combustion pass over the outside surfaces of the tubes.

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.

Table 1 to Subpart DDDDD of Part 63—Emission Limits and Work Practice Standards

As stated in § 63.7500, you must comply with the following applicable emission limits and work practice standards:

If your boiler or process heater is in this subcategory . . .	For the following pollutants . . .	You must meet the following emission limits and work practice standards . . .
9. Existing large solid fuel	a. Particulate Matter (or Total Selected Metals)	0.07 lb per MMBtu of heat input; or (0.001 lb per MMBtu of heat input)
	b. Hydrogen Chloride	0.09 lb per MMBtu of heat input
	c. Mercury	0.000009 lb per MMBtu of heat input

Table 2 to Subpart DDDDD of Part 63—Operating Limits for Boilers and Process Heaters With Particulate Matter Emission Limits

As stated in § 63.7500, you must comply with the applicable operating limits:

If you demonstrate compliance with applicable particulate matter emission limits using . . .	You must meet these operating limits . . .
1. Wet scrubber control.....	a. Maintain the minimum pressure drop and liquid flow-rate at or above the operating levels established during the performance test according to § 63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for particulate matter.
2. Fabric filter control.....	a. Install and operate a bag leak detection system according to § 63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period; or 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.

- 3. Electrostatic precipitator control.
a. This option is for boilers and process heaters that operate dry control systems. Existing boilers and process heaters must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent.
- 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.

Table 3 to Subpart DDDDD of Part 63—Operating Limits for Boilers and Process Heaters With Mercury Emission Limits and Boilers and Process Heaters That Choose To Comply With the Alternative Total Selected Metals Emission Limits

As stated in § 63.7500, you must comply with the applicable operating limits:

If you demonstrate compliance with applicable mercury and/or total selected metals emission limits using . . .

You must meet these operating limits . . .

-
- 1. Wet scrubber control.....
Maintain the minimum pressure drop and liquid flow-rate at or above the operating levels established during the performance test according to § 63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limits for mercury and/or total selected metals.
 - 2. Fabric filter control.....
 - a. Install and operate a bag leak detection system according to § 63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month period; or
 - 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.

- 3. Electrostatic precipitator control. a. This option is for boilers and process heaters that operate dry control systems. Existing sources must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent.
- 4. Dry scrubber or carbon injection control. Maintain the minimum sorbent or carbon injection rate at or above the operating levels established during the performance test according to § 63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for mercury.
- 5. Any other control type..... This option is only for boilers and process heaters that operate dry control systems. Existing sources must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent. New sources must maintain opacity to less than or equal to 10 percent opacity (1-hour block average).
- 6. Fuel analysis..... Maintain the fuel type or fuel mixture such that the mercury and/or total selected metals emission rates calculated according to § 63.7530(d)(4) and/or (5) is less than the applicable emission limits for mercury and/or total selected metals.

Table 4 to Subpart DDDDD of Part 63—Operating Limits for Boilers and Process Heaters With Hydrogen Chloride Emission Limits

As stated in § 63.7500, you must comply with the following applicable operating limits:

If you demonstrate compliance with applicable hydrogen chloride emission limits using . . .

You must meet these operating limits . . .

-
- 1. Wet scrubber control..... Maintain the minimum scrubber effluent pH, pressure drop, and liquid flow-rate at or above the operating levels established during the performance test according to § 63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for hydrogen chloride.

- 2. Dry scrubber control..... Maintain the minimum sorbent injection rate at or above the operating levels established during the performance test according to § 63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for hydrogen chloride.
- 3. Fuel analysis..... Maintain the fuel type or fuel mixture such that the hydrogen chloride emission rate calculated according to § 63.7530(d)(3) is less than the applicable emission limit for hydrogen chloride.

Table 5 to Subpart DDDDD of Part 63—Performance Testing Requirements

As stated in § 63.7520, you must comply with the following requirements for performance test for existing, new or reconstructed affected sources:

To conduct a performance test for the following pollutant . . .	You must . . .	Using . . .
1. Particulate Matter.....	<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 concentration to lb per MMBtu emission rates. 	<ul style="list-style-type: none"> 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 §63.14(i)). Method 4 in appendix A to part 60 of this chapter. Method 5 or 17 (positive pressure fabric filters must use Method 5D) in appendix A to part 60 of this chapter. Method 19 F-factor methodology in appendix A to part 60 of this chapter.
2. Total selected metals....	<ul style="list-style-type: none"> a. Select sampling ports location and the number of traverse points. 	<ul style="list-style-type: none"> Method 1 in appendix A to part 60 of this chapter.

	b. Determine velocity and volumetric flow-rate of the stack gas.	Method 2, 2F, or 2G in appendix A to part 60 of this chapter.
	c. Determine oxygen and carbon dioxide concentrations of the stack gas.	Method 3A or 3B in appendix A to part 60 of this chapter, or ASME PTC 19, Part 10 (1981) (IBR, see § 63.14(i)).
	d. Measure the moisture content of the stack gas.	Method 4 in appendix A to part 60 of this chapter.
	e. Measure the total selected metals emission concentration.	Method 29 in appendix A to part 60 of this chapter.
	f. Convert emissions concentration to lb per MMBtu emission rates.	Method 19 F-factor methodology in appendix A to part 60 of this chapter.
3. Hydrogen chloride.....	a. Select sampling ports location and the number of traverse points.	Method 1 in appendix A to part 60 of this chapter.
	b. Determine velocity and volumetric flow-rate of the stack gas.	Method 2, 2F, or 2G in appendix A to part 60 of this chapter.
	c. Determine oxygen and carbon dioxide concentrations of the stack gas.	Method 3A or 3B in appendix A to part 60 of this chapter, or ASME PTC 19, Part 10 (1981) (IBR, see § 63.14(i)).
	d. Measure the moisture content of the stack gas.	Method 4 in appendix A to part 60 of this chapter.
	e. Measure the hydrogen chloride emission concentration.	Method 26 or 26A in appendix A to part 60 of this chapter.
	f. Convert emissions concentration to lb per MMBtu emission rates.	Method 19 F-factor methodology in appendix A to part 60 of this chapter.
4. Mercury.....	a. Select sampling ports location and the number of traverse points.	Method 1 in appendix A to part 60 of this chapter.

	b. Determine velocity and volumetric flow-rate of the stack gas.	Method 2, 2F, or 2G in appendix A to part 60 of this chapter.
	c. Determine oxygen and carbon dioxide concentrations of the stack gas.	Method 3A or 3B in appendix A to part 60 of this chapter, or ASME PTC 19, Part 10 (1981) (IBR, see §62.14(i)).
	d. Measure the moisture content of the stack gas.	Method 4 in appendix A to part 60 of this chapter.
	e. Measure the mercury emission concentration.	Method 29 in appendix A to part 60 of this chapter or Method 101A in appendix B to part 61 of this chapter or ASTM Method D6784-02 (IBR, see § 63.14(b)).
	f. Convert emissions concentration to lb per MMBtu emission rates.	Method 19 F-factor methodology in appendix A to part 60 of this chapter.
5. Carbon Monoxide.....	a. Select the sampling ports location and the number of traverse points.	Method 1 in appendix A to part 60 of this chapter.
	b. Determine oxygen and carbon dioxide concentrations of the stack gas.	Method 3A or 3B in appendix A to part 60 of this chapter, or ASTM D6522-00 (IBR, see §63.14(b)), or ASME PTC 19, Part 10(1981) (IBR, see § 63.14(i)).
	c. Measure the moisture content of the stack gas.	Method 4 in appendix A to part 60 of this chapter.
	d. Measure the carbon monoxide emission concentration.	Method 10, 10A, or 10B in appendix A to part 60 of this chapter, or ASTM D6522-00 (IBR, see § 63.14(b)) when the fuel is natural gas.

Table 6 to Subpart DDDDD of Part 63—Fuel Analysis Requirements

As stated in § 63.7521, you must comply with the following requirements for fuel analysis testing for existing, new or reconstructed affected sources:

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 concentrations into units of pounds of pollutant per MMBtu of heat content.	Procedure in § 63.7521(c) or ASTM D2234-00 \1\ (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 D2013-01 (for coal) (IBR, see § 63.14(b)) or ASTM D5198-92 (2003) (for biomass)(IBR, see § 63.14(b)) or equivalent. ASTM D5865-03a (for coal)(IBR, see § 63.14(b)) or ASTM E711-87 (1996) (for biomass)(IBR, see §63.14(b)) or equivalent. ASTM D3173-02 (IBR, see § 63.14(b)) or ASTM E871-82 (1998)(IBR, see § 63.14(b)) or equivalent. ASTM D3684-01 (for coal)(IBR, see § 63.14(b)) or SW-846-7471A (for solid samples) or SW-846 7470A (for liquid samples).

2. Total selected metals....
- a. Collect fuel samples. Procedure in § 63.7521(c) or ASTM D2234-00 \1\ (for coal)(IBR, see § 63.14(b)) or ASTM D6323-98 (2003) (for biomass)(IBR, see § 63.14(b)) or equivalent.
 - b. Composite fuel samples. Procedure in §63.7521(d) or equivalent.
 - c. Prepare composited fuel samples. SW-846-3050B (for solid samples) or SW-846-3020A (for liquid samples) or ASTM D2013-01 (for coal)(IBR, see § 63.14(b)) or ASTM D5198-92 (2003)(for biomass)(IBR, see § 63.14(b)) or equivalent.
 - d. Determine heat content of the fuel type. ASTM D5865-03a (for coal)(IBR, see § 63.14(b)) or ASTM E 711-87 (for biomass)(IBR, see § 63.14(b)) or equivalent.
 - e. Determine moisture content of the fuel type. ASTM D3173-02 (IBR, see § 63.14(b)) or ASTM E871 (IBR, see § 63.14(b)) or equivalent.
 - f. Measure total selected metals concentration in fuel sample. SW-846-6010B or ASTM D3683-94 (2000) (for coal) (IBR, see § 63.14(b)) or ASTM E885-88 (1996) (for biomass)(IBR, see § 63.14(b)).
 - g. Convert concentrations into units of pounds of pollutant per MMBtu of heat content.
3. Hydrogen chloride.....
- a. Collect fuel samples. Procedure in § 63.7521(c) or ASTM D2234 \1\ (for coal)(IBR, see § 63.14(b)) or ASTM D6323-98 (2003) (for biomass)(IBR, see § 63.14(b)) or equivalent.
 - b. Composite fuel samples. Procedure in § 63.7521(d) or equivalent.

- | | |
|--|--|
| c. Prepare composited fuel samples. | SW-846-3050B (for solid samples) or SW-846-3020A (for liquid samples) or ASTM D2013-01 (for coal)(IBR, see § 63.14(b)) or ASTM D5198-92 (2003) (for biomass)(IBR, see § 63.14(b)) or equivalent. |
| d. Determine heat content of the fuel type. | ASTM D5865-03a (for coal)(IBR, see § 63.14(b)) or ASTM E711-87 (1996) (for biomass)(IBR, see § 63.14(b)) or equivalent. |
| e. Determine moisture content of the fuel type. | ASTM D3173-02 (IBR, see § 63.14(b)) or ASTM E871-82 (1998)(IBR, see § 63.14(b)) or equivalent. |
| f. Measure chlorine concentration in fuel sample. | SW-846-9250 or ASTM E776-87 (1996) (for biomass)(IBR, see § 63.14(b)) or equivalent. |
| g. Convert concentrations into units of pounds of pollutant per MMBtu of heat content. | |

Table 7 to Subpart DDDDD of Part 63—Establishing Operating Limits

As stated in § 63.7520, you must comply with the following requirements for establishing operating limits:

If you have an applicable emission limit for . . .	And your operating limits are based on . . .	You must . . .	Using . . .	According to the following requirements
1. Particulate, matter mercury, or total selected metals.	a. Wet scrubber operating parameters.	i. Establish a site-specific minimum pressure drop and minimum flow rate operating limit according to § 63.7530(c).	(1) Data from the pressure drop and liquid flow rate monitors and the particulate matter, mercury, or total selected metals.	(a) You must collect pressure drop and flow-rate data every 15 minutes during the entire period of the performance tests;

	b. Electrostatic precipitator operating parameters (option only for unit with additional wet scrubber control).	i. Establish a site-specific minimum voltage and secondary current or total power input according to § 63.7530(c).	(1) Data from the pressure drop and liquid flow rate monitors and the particulate matter, mercury, or total selected metals.	(b) Determine the average pressure drop and liquid flow-rate for each individual test run in the three-run performance test by computing the average of all the 15-minute readings taken during each test run. (a) You must collect voltage and secondary current or total power input data during the entire period of the performance tests; (b) Determine the average voltage and secondary current or total power input for each individual test
run				in the three-run performance test by computing the average of all the 15-minute readings taken during each test run.
2. Hydrogen Chloride.	a. Wet scrubber operating parameters.	i. Establish a site-specific minimum pressure drop and minimum flow rate operating limit according to § 63.7530(c).	(1) Data from the pH, pressure drop and liquid flow rate monitors and the hydrogen chloride performance test.	(a) You must collect pH, pressure drop and flow-rate data every 15 minutes during the entire period of the performance tests; (b) Determine the average pH, pressure drop and liquid flow-rate for each individual test run in the three-run performance test by computing the average of all the 15-minute readings taken during each test run.
	b. Dry scrubber operating parameters.	i. Establish a site-specific minimum sorbent injection rate operating limit according to § 63.7530(c).	(1) Data from the sorbent injection rate monitors and the hydrogen chloride performance test.	(a) You must collect sorbent injection rate data every 15 minutes during the entire period of the performance tests;

run

(b) Determine the average sorbent injection rate for each individual test

in the three-run performance test by computing the average of all the 15-minute readings taken during each test run.

Table 8 to Subpart DDDDD of Part 63—Demonstrating Continuous Compliance

As stated in § 63.7540, you must show continuous compliance with the emission limitations for affected sources according to the following:

If you must meet the following operating limits or work practice standards . . .

You must demonstrate continuous compliance by . . .

1. Opacity.....

- a. Collecting the opacity monitoring system data according to §§ 63.7525(b) and 63.7535; and
- b. Reducing the opacity monitoring data to 6-minute averages; and
- c. Maintaining opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent for existing sources;

2. Fabric Filter Bag Leak Detection Operation.

Installing and operating a bag leak detection system according to § 63.7525 and operating the fabric filter such that the requirements in § 63.7540(a)(9) are met.

3. Wet Scrubber Pressure Drop and Liquid Flow-rate.

- a. Collecting the pressure drop and liquid flow rate monitoring system data according to §§ 63.7525 and 63.7535; and
- b. Reducing the data to 3-hour block averages; and
- c. Maintaining the 3-hour average pressure drop and liquid flow-rate at or above the operating limits established during the performance test according to § 63.7530(c).

4. Wet Scrubber pH.....

- a. Collecting the pH monitoring system data according to §§ 63.7525 and 63.7535; and
- b. Reducing the data to 3-hour block averages; and

- 5. Dry Scrubber Sorbent or Carbon Injection Rate.

 - c. Maintaining the 3-hour average pH at or above the operating limit established during the performance test according to § 63.7530(c).
 - 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).

- 6. Electrostatic Precipitator Secondary Current and Voltage or Total Power Input.

 - a. Collecting the secondary current and voltage or total power input monitoring system data for the electrostatic precipitator according to §§ 63.7525 and 63.7535; and
 - b. Reducing the data to 3-hour block averages; and
 - c. Maintaining the 3-hour average secondary current and voltage or total power input at or above the operating limits established during the performance test according to §§ 63.7530(c).

- 7. Fuel Pollutant Content.....

 - a. Only burning the fuel types and fuel mixtures used to demonstrate compliance with the applicable emission limit according to § 63.7530(c) or (d) as applicable; and
 - b. Keeping monthly records of fuel use according to § 63.7540(a).

Table 9 to Subpart DDDDD of Part 63—Reporting Requirements

As stated in § 63.7550, you must comply with the following requirements for reports:

You must submit a(n)	The report must contain . . .	You must submit the report . . .
1. Compliance report.....	a. Information required in § 63.7550(c)(1) through (11); and	Semiannually according to the requirements in § 63.7550(b).

- b. If there are no deviations from any emission limitation (emission limit and operating limit) that applies to you and there are no deviations from the requirements for work practice standards in Table 8 to this subpart that apply to you, a statement that there were no deviations from the emission limitations and work practice standards during the reporting period. If there were no periods during which the CMSs, including continuous emissions monitoring system, continuous opacity monitoring system, and operating parameter monitoring systems, were out-of-control as specified in § 63.8(c)(7), a statement that there were no periods during which the CMSs were out-of-control during the reporting period; and
- c. If you have a deviation from any emission limitation (emission limit and operating limit) or work practice standard during the reporting period, the report must contain the information in § 63.7550(d). If there were periods during which the CMSs, including continuous emissions monitoring system, continuous opacity monitoring system, and operating parameter monitoring systems, were out-of-control, as specified in § 63.8(c)(7), the report must contain the information in § 63.7550(e); and
- d. If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in § 63.10(d)(5)(i).

2. An immediate startup, shutdown, and malfunction report if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard.
- a. Actions taken for the event; and
 - i. By fax or telephone within 2 working days after starting actions inconsistent with the plan; and
 - ii. By letter within 7 working days
 - b. The information in § 63.10(d)(5)(ii) after the end of the event unless you have made alternative arrangements with the permitting authority.

Table 10 to Subpart DDDDD of Part 63—Applicability of General Provisions to Subpart DDDDD

As stated in § 63.7565, you must comply with the applicable General Provisions according to the following:

Citation	Subject	Brief description	Applicable
§ 63.1.....	Applicability.....	Initial Applicability Determination; Applicability After Standard Established; Permit Requirements; Extensions, Notifications.	Yes.
§ 63.2.....	Definitions.....	Definitions for part 63 standards.	Yes.
§ 63.3.....	Units and Abbreviations...	Units and abbreviations for part 63 standards.	Yes.
§ 63.4.....	Prohibited Activities.....	Prohibited Activities; Compliance date; Circumvention, Severability.	Yes.
§ 63.5.....	Construction/ Reconstruction.	Applicability; applications; approvals.	Yes.
§ 63.6(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(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(e)(1)-(2).....	Operation & Maintenance. and Operation and maintenance requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met.	Operate to minimize emissions at all times; and Correct malfunctions as soon as practicable;	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, record, inspection.	Yes.
§ 63.6(g)(1)-(3).....	Alternative Standard.....	Procedures for getting an alternative standard.	Yes.
§ 63.6(h)(1).....	Compliance with Opacity/VE Standards.	Comply with opacity/VE emission limitations at all times except during SSM.	Yes.
§ 63.6(h)(2)(i).....	Determining Compliance with Opacity/Visible Emission (VE) Standards.	If standard does not state test method, use Method 9 for opacity and Method 22 for VE.	No.
§ 63.6(h)(2)(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)(4).....	Notification of Opacity/VE Observation Date.	Notify Administrator of anticipated date of observation.	No.
§ 63.6(h)(5)(i),(iii)-(v).....	Conducting Opacity/VE Observations.	Dates and Schedule for conducting opacity/VE observations.	No.
§ 63.6(h)(5)(ii).....	Opacity Test Duration and Averaging Times.	Must have at least 3 hours of observation with thirty, 6-minute averages.	No.
§ 63.6(h)(6).....	Records of Conditions During Opacity/VE	Keep records available and allow Administrator to	No.

	observations.	inspect.	
§ 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 adjust an opacity standard.	Yes.
§ 63.6(i)(1)-(14).....	Compliance Extension.....	Procedures and criteria for Administrator to	Yes.

		grant compliance extension.	
§ 63.6(j).....	Presidential Compliance Exemption.	President may exempt source category from requirement to comply with rule.	Yes.
§ 63.7(a)(1).....	Performance Test Dates....	Dates for Conducting Initial Performance Testing and Other Compliance Demonstrations.	Yes.
§ 63.7(a)(2).....	Performance Test Dates....	New source with initial startup date before effective date has 180 days after effective date to demonstrate compliance	Yes.
§ 63.7(a)(2)(ix).....	Performance Test Dates....	2. If source initially demonstrates compliance with less stringent proposed standard, it has 3 years and 180 days after the effective date of the standard or 180 days after startup of source, whichever is later, to demonstrate compliance with promulgated standard.	No.
§ 63.7(a)(3).....	Section 114 Authority.....	Administrator may require a performance test under CAA Section 114 at any time.	Yes.
§ 63.7(b)(1).....	Notification of Performance Test.	Must notify Administrator 60 days before the test.	No.
§ 63.7(b)(2).....	Notification of Rescheduling.	If rescheduling a performance test is necessary, must notify Administrator 5 days before scheduled date of rescheduled date.	Yes.
§ 63.7(c).....	Quality Assurance/Test Plan.	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with: test plan approval procedures; and performance audit requirements; and internal and external QA procedures for testing.	Yes.
§ 63.7(d).....	Testing Facilities.....	Requirements for testing facilities.	Yes.
§ 63.7(e)(1).....	Conditions for Conducting Performance Tests.	1. Performance tests must be conducted under representative conditions; and	No.
		2. Cannot conduct	Yes.

		performance tests during SSM; and	
		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)(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)(2)-(3).....	Multiple Effluents and Multiple Monitoring Systems.	Specific requirements for installing monitoring systems; and must install on each effluent before it is combined and before it is released to the atmosphere unless Administrator approves otherwise; and if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup.	Yes.
§ 63.8(c)(1).....	Monitoring System Operation and Maintenance.	Maintain monitoring system in a manner consistent with good air pollution control practices.	Yes.
§ 63.8(c)(1)(i).....	Routine and Predictable SSM.	Maintain and operate CMS according to § 63.6(e)(1).	Yes.
§ 63.8(c)(1)(ii).....	SSM not in SSMP.....	Must keep necessary parts available for routine repairs of CMSs.	Yes.
§ 63.8(c)(1)(iii).....	Compliance with Operation and Maintenance.	Must develop an SSMP for CMS.	Yes.
§ 63.8(c)(2)-(3).....	Monitoring System Installation.	Must install to get representative emission and parameter measurements; and must verify operational status before or at performance test.	Yes.
§ 63.8(c)(4).....	Continuous Monitoring System (CMS) Requirements.	CMSs must be operating except during breakdown, out-of-control, repair, maintenance, and high-level calibration drifts.	No.
§ 63.8(c)(4)(i).....	Continuous Monitoring System (CMS) Requirements.	Continuous opacity monitoring system must have a minimum of one cycle of sampling and analysis for each successive 10-second period and one cycle of data recording for each successive 6-minute period.	Yes.
§ 63.8(c)(4)(ii).....	Continuous Monitoring System (CMS) Requirements.	Continuous emissions monitoring system must have a minimum of one cycle of operation for	No.

		each successive 15-minute period.	
§ 63.8(c)(5).....	Continuous Opacity Monitoring system (COMS) Requirements.	Must do daily zero and high level calibrations.	Yes.
§ 63.8(c)(6).....	Continuous Monitoring System (CMS) Requirements.	Must do daily zero and high level calibrations.	No.
§ 63.8(c)(7)-(8).....	Continuous Monitoring Systems Requirements.	Out-of-control periods, including reporting.	Yes.
§ 63.8(d).....	Continuous Monitoring Systems Quality Control.	Requirements for continuous monitoring Systems quality control, including calibration, etc.; and must keep quality control plan on record for the life of the affected source. Keep old versions for 5 years after revisions.	Yes.
§ 63.8(e).....	Continuous monitoring systems Performance Evaluation.	Notification, performance evaluation test plan, reports.	Yes.
§ 63.8(f)(1)-(5).....	Alternative Monitoring Method.	Procedures for Administrator to approve alternative monitoring.	Yes.
§ 63.8(f)(6).....	Alternative to Relative Accuracy Test.	Procedures for Administrator to approve alternative relative accuracy tests for continuous emissions monitoring system.	No.
§ 63.8(g)(1)-(4).....	Data Reduction.....	Continuous opacity monitoring system 6-minute averages calculated over at least 36 evenly spaced data points; and continuous emissions monitoring system 1-hour averages computed over at least 4 equally spaced data points.	Yes.
§ 63.8(g)(5).....	Data Reduction.....	Data that cannot be used in computing averages for continuous emissions monitoring system and continuous opacity monitoring system.	No.
§ 63.9(a).....	Notification Requirements.	Applicability and State Delegation	Yes.

§ 63.9(b)(1)-(5).....	Initial Notifications.....	Submit notification 120 days after effective date; and Notification of intent to construct/reconstruct; and Notification of commencement of construct/reconstruct; Notification of startup; and Contents of each.	Yes.
§ 63.9(c).....	Request for Compliance Extension.	Can request if cannot comply by date or if installed BACT/LAER.	Yes.
§ 63.9(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 that exceeded criterion for relative accuracy.	Yes.
§ 63.9(h)(1)-(6).....	Notification of Compliance Status.	Contents; and due 60 days after end of performance test or other compliance demonstration, and when to submit to Federal vs. State authority.	Yes.
§ 63.9(i).....	Adjustment of Submittal Deadlines.	Procedures for Administrator to approve change in when notifications must be submitted.	Yes.
§ 63.9(j).....	Change in Previous Information.	Must submit within 15 days after the change.	Yes.
§ 63.10(a).....	Recordkeeping/Reporting...	Applies to all, unless compliance extension; and when to submit to Federal vs. State authority; and procedures for owners of more than 1 source.	Yes.
§ 63.10(b)(1).....	Recordkeeping/Reporting...	General Requirements; and keep all records readily available and keep for 5 years.	Yes.

§ 63.10(b)(2)(i)-(v).....	Records related to Startup, Shutdown, and Malfunction.	Occurrence of each of operation (process, equipment); and occurrence of each malfunction of air pollution equipment; and maintenance of air pollution control equipment; and actions during startup, shutdown, and malfunction.	Yes.
§ 63.10(b)(2)(vi) & (x-xi)...	Continuous monitoring systems Records.	Malfunctions, inoperative, out-of-control; and calibration checks; and adjustments, maintenance.	Yes.
§ 63.10(b)(2)(vii)-(ix)...	Records.....	Measurements to demonstrate compliance with emission limitations; and performance test, performance evaluation, and visible emission observation results; and measurements to determine conditions of performance tests and performance evaluations.	Yes.
§ 63.10(b)(2)(xii).....	Records.....	Records when under waiver.	Yes.
§ 63.10(b)(2)(xiii).....	Records.....	Records when using alternative to relative accuracy test.	No.
§ 63.10(b)(2)(xiv).....	Records.....	All documentation supporting Initial Notification and Notification of Compliance Status.	Yes.
§ 63.10(b)(3).....	Records.....	Applicability Determinations.	Yes.
§ 63.10(c)(1),(5)-(8),(10)-(15).	Records.....	Additional Records for continuous monitoring systems.	Yes.
§ 63.10(c)(7)-(8).....	Records.....	Records of excess emissions and parameter monitoring exceedances for continuous monitoring systems.	No.
§ 63.10(d)(1).....	General Reporting Requirements.	Requirement to report.....	Yes.
§ 63.10(d)(2).....	Report of Performance Test Results.	When to submit to Federal or State authority.	Yes.
§ 63.10(d)(3).....	Reporting Opacity or VE Observations.	What to report and when...	Yes.
§ 63.10(d)(4).....	Progress Reports.....	Must submit progress reports on schedule if	Yes.

		under compliance 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 exceedance (now defined as deviations).	No.
§ 63.10(e)(3)(iv-v).....	Excess Emissions Reports..	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedance (now defined as deviations); and provision to request semiannual reporting after compliance for one year; and submit report by 30th day following end of quarter or calendar half; and if there has not been an exceedance or excess emission (now defined as deviations), report contents is a statement that there have been no deviations.	No.
§ 63.10(e)(3)(iv-v).....	Excess Emissions Reports..	Must submit report containing all of the information in § 63.10(c)(5-13), § 63.8(c)(7-8).	No.
§ 63.10(e)(3)(vi-viii).....	Excess Emissions Report and Summary Report.	Requirements for reporting excess emissions for continuous monitoring systems (now called deviations); Requires all of the information in § 63.10(c)(5-13), § 63.8(c)(7-8).	No.
§ 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.
§ 63.12.....	Delegation.....	State authority to enforce	Yes.

		standards.	
§ 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.

Appendix A to Subpart DDDDD—Methodology and Criteria for Demonstrating Eligibility for the Health-Based Compliance Alternatives

1. Purpose/Introduction

This appendix provides the methodology and criteria for demonstrating that your affected source is eligible for the compliance alternative for the HCl emission limit and/or the total selected metals (TSM) emission limit. This appendix specifies emissions testing methods that you must use to determine HCl, chlorine, and manganese emissions from the affected units and what parts of the affected source facility must be included in the eligibility demonstration. You must demonstrate that your affected source is eligible for the health-based compliance alternatives using either a look-up table analysis (based on the look-up tables included in this appendix) or a site-specific compliance demonstration performed according to the criteria specified in this appendix. This appendix also specifies how and when you file any eligibility demonstrations for your affected source and how to show that your affected source remains eligible for the health-based compliance alternatives in the future.

2. Who Is Eligible To Demonstrate That They Qualify for the Health-Based Compliance Alternatives?

Each new, reconstructed, or existing affected source may demonstrate that they are eligible for the health-based compliance alternatives. Section 63.7490 of subpart DDDDD defines the affected source and explains which affected sources are new, existing, or reconstructed.

3. What Parts of My Facility Have To Be Included in the Health-Based Eligibility Demonstration?

If you are attempting to determine your eligibility for the compliance alternative for HCl, you must include every emission point subject to subpart DDDDD that emits either HCl or Cl₂ in the eligibility demonstration.

If you are attempting to determine your eligibility for the compliance alternative for TSM, you must include every emission point subject to subpart DDDDD that emits manganese in the eligibility demonstration.

4. How Do I Determine HAP Emissions From My Affected Source?

(a) You must conduct HAP emissions tests or fuel analysis for every emission point covered under subpart DDDDD within the affected source facility according to the requirements in paragraphs (b) through (f) of this section and the methods specified in Table 1 of this appendix.

(1) If you are attempting to determine your eligibility for the compliance alternative for HCl, you must test the subpart DDDDD units at your facility for both HCl and Cl₂. When conducting fuel analysis, you must assume any chlorine detected will be emitted as Cl₂.

(2) If you are attempting to determine your eligibility for the compliance alternative for TSM, you must test the subpart DDDDD units at your facility for manganese.

(b) *Periods when emissions tests must be conducted.* (1) You must not conduct emissions tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).

(2) You must test under worst-case operating conditions as defined in this appendix. You must describe your worst-case operating conditions in your performance test report for the process and control systems (if applicable) and explain why the conditions are worst-case.

(c) *Number of test runs.* You must conduct three separate test runs for each test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour.

(d) *Sampling locations.* Sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.

(e) *Collection of monitoring data for HAP control devices.* During the emissions test, you must collect operating parameter monitoring system data at least every 15 minutes during the entire emissions test and establish the site-specific operating requirements in Tables 3 or 4, as appropriate, of subpart DDDDD using data from the monitoring system and the procedures specified in §63.7530 of subpart DDDDD.

(f) *Nondetect data.* You may treat emissions of an individual HAP as zero if all of the test runs result in a nondetect measurement and the condition in paragraph (f)(1) of this section is met for the manganese test method. Otherwise, nondetect data for individual HAP must be treated as one-half of the method detection limit.

(1) For manganese measured using Method 29 in appendix A to 40 CFR part 60, you analyze samples using atomic absorption spectroscopy (AAS).

(g) You must determine the maximum hourly emission rate for each appropriate emission point according to Equation 1 of this appendix. An appropriate emission point is any emission point emitting HCl, Cl₂, or Manganese from a subpart DDDDD emission unit.

$$E_{i,s} = \sum_{j=1}^t (R_{i,j} \times I_j) \quad (\text{Eq. 1})$$

Where:

$E_{i,s}$ = maximum hourly emission rate for HAP i at each emission point s associated with a subpart DDDDD emission unit j, lbs/hr

i = applicable HAP, where i = (HCl, Cl₂, or Manganese) s = individual emission point

j = each subpart DDDDD emission unit associated with an emission point, s

t = total number of subpart DDDDD emission units associated with an emission point s

$R_{i,j}$ = emission rate (the 3-run average as determined according to table 1 of this appendix or the pollutant concentration in the fuel samples analyzed according to §63.7521) for HAP i at subpart DDDDD emission unit j associated with emission point s, lb per million Btu.

I_j = Maximum rated heat input capacity of each subpart DDDDD unit j emitting HAP i associated with emission point s, million Btu per hour.

5. What Are the Criteria for Determining If My Facility Is Eligible for the Health-Based Compliance Alternatives?

(a) Determine the HAP emissions from each appropriate emission point within the affected source facility using the procedures specified in section 4 of this appendix.

(b) Demonstrate that your facility is eligible for either of the health-based compliance alternatives using either the methods described in section 6 of this appendix (look-up table analysis) or section 7 of this appendix (site-specific compliance demonstration).

(c) Your facility is eligible for the health-based compliance alternative for HCl if one of the following two statements is true:

(1) The calculated HCl-equivalent emission rate is below the appropriate value in the look-up table;

(2) Your site-specific compliance demonstration indicates that none of your HI values for HCl and Cl₂ are greater than 1.0 at locations where people live or congregate (e.g., schools, daycare centers, etc.);

(d) Your facility is eligible for the health-based compliance alternative for TSM if one of the following two statements is true:

(1) The manganese emission rate for all your subpart DDDDD sources is below the appropriate value in the look-up table;

(2) Your site-specific compliance demonstration indicates that none of your HQ values for manganese are greater than 1.0 at locations where people live or congregate (e.g., schools, daycare centers, etc.).

6. How Do I Conduct a Look-Up Table Analysis?

You may use look-up tables to demonstrate that your facility is eligible for either the compliance alternative for HCl emissions limit or the compliance alternative for the TSM emissions limit, unless your permitting authority determines that the look-up table analysis in this section is not applicable to your facility on technical grounds due to site-specific variations that are not accounted for in the look-up table analysis (e.g. presence of complex terrain, rain caps, or building downwash effects).

(a) *HCl compliance alternative.* (1) Using the emission rates for HCl and Cl₂ determined according to section 4 of this appendix, calculate, using equation 2 of this appendix, the toxicity-weighted emission rate (expressed in HCl-equivalents) for each emission point that emits HCl or Cl₂ from any subpart DDDDD sources. Then, calculate the weighted average stack height using equation 3 of this appendix.

$$TW_s = E_{HCl,s} + E_{Cl_2,s} \left(\frac{RV_{HCl}}{RV_{Cl_2}} \right) \quad (\text{Eq. 2})$$

Where:

TW_s = the toxicity-weighted emission rate (in HCl-equivalent) for each emission point s, lb/hr.

s = individual emission points

E_{HCl,s} = the maximum hourly emission rate for HCl at emission point s, lb/hr

E_{Cl₂,s} = the maximum hourly emission rate for Cl₂ at emission point s, lb/hr

RV_{Cl₂} = the reference value for Cl₂

RV_{HCl} = the reference value for HCl

(reference values for HCl and Cl₂ can be found at <http://www.epa.gov/ttn/atw/toxsource/summary.html>).

$$H_{HCl} = \frac{\sum_{s=1}^n (TW_s \times H_s)}{TW_T} \quad (\text{Eq. 3})$$

Where:

H_{HCl} = weighted average stack height for determining the maximum allowable HCl-equivalent emission rate (in Table 2 to this appendix), m.

s = individual emission points

n = total number of emission points

TW_s = toxicity-weighted HCl-equivalent emission rate from each emission point (from equation 2), lb/hr.

H_s = height of each individual stack, m

TW_T = total toxicity-weighted HCl-equivalent emission rate from the source (summed for all emission points), lb/hr.

(2) Calculate the total toxicity-weighted emission rate for your affected source by summing the toxicity-weighted emission rate for each appropriate subpart DDDDD emission point.

(3) Using the weighted average stack height and the minimum distance between any appropriate subpart DDDDD emission point at the source and the property boundary, identify the appropriate maximum allowable toxicity weighted emission rate for your affected source, expressed in HCl-equivalents, from table 2 of this appendix. Appropriate emission points are those that emit HCl or Cl₂, or both, from subpart DDDDD units. If one or both of these values does not match the exact values in the look-up tables, then use the next lowest table value. (Note: If your weighted average stack height is less than 5 meters (m), you must use the 5 meter row.) Your affected source is eligible to comply with the health-based alternative for HCl emissions if the value calculated in paragraph (a)(2) of this section, determined using the methods specified in this appendix, does not exceed the appropriate value in table 2 of this appendix.

(b) *TSM Compliance Alternative.* Using the emission rates for manganese determined according to section 4 of this appendix, calculate the total manganese emission rate for your affected source by summing the maximum hourly manganese emission rates for all your subpart DDDDD units. Identify the appropriate allowable emission rate in table 3 of this appendix for your affected source using the weighted average stack height value and the minimum distance between any appropriate subpart DDDDD emission point at the facility and the property boundary. Appropriate emission points are those that emit manganese from subpart DDDDD units. If one or both of these values does not match the exact values in the look-up tables, then use the next lowest table value. (Note: If your weighted average stack height is less than 5 meters, you must use the 5 meter row.) Your affected source is eligible to comply with the health-based alternative for manganese emissions and may exclude manganese when demonstrating compliance with the TSM emission limit if the total manganese emission rate, determined using the methods specified in this appendix, does not exceed the appropriate value specified in table 3 of this appendix.

$$H_{Mn} = \frac{\sum_{s=1}^n (E_{Mn,s} \times H_s)}{E_{Mn,T}} \quad (\text{Eq. 4})$$

Where:

H_{Mn} = weighted average stack height for determining the maximum allowable emission rate for manganese (in table 3 to this appendix), m.

s = individual emission points

n = total number of emission points

E_{Mn,s} = maximum hourly manganese emissions from emission point s, lbs/hr.

H_s = height of each individual stack s

E_{Mn,T} = total maximum hourly manganese emissions from affected source (sum emission rates from all emission points), lb/hr

7. How Do I Conduct a Site-Specific Compliance Demonstration?

If you fail to demonstrate that your facility is able to comply with one or both of the alternative health-based emission standards using the look-up table approach, you may choose to perform a site-specific compliance demonstration for your facility. You may use any scientifically-accepted peer-reviewed risk assessment methodology for your site-specific compliance demonstration. An example of one approach for performing a site-specific compliance demonstration for air toxics can be found in the EPA's "Air Toxics Risk Assessment Reference Library, Volume 2, Site-Specific Risk Assessment Technical Resource Document", which may be obtained through the EPA's Air Toxics Web site at http://www.epa.gov/ttn/fera/risk_atoxic.html.

(a) Your facility is eligible for the HCl alternative compliance option if your site-specific compliance demonstration shows that the maximum HI for HCl and Cl₂ from your subpart DDDDD sources is less than or equal to 1.0.

(b) Your facility is eligible for the TSM alternative compliance option if your site-specific compliance demonstration shows that the maximum HQ for manganese from your subpart DDDDD sources is less than or equal to 1.0.

(c) At a minimum, your site-specific compliance demonstration must:

(1) Estimate long-term inhalation exposures through the estimation of annual or multi-year average ambient concentrations;

(2) Estimate the inhalation exposure for the individual most exposed to the facility's emissions;

(3) Use site-specific, quality-assured data wherever possible;

(4) Use health-protective default assumptions wherever site-specific data are not available, and;

(5) Contain adequate documentation of the data and methods used for the assessment so that it is transparent and can be reproduced by an experienced risk assessor and emissions measurement expert.

(d) Your site-specific compliance demonstration need not:

(1) Assume any attenuation of exposure concentrations due to the penetration of outdoor pollutants into indoor exposure areas;

(2) Assume any reaction or deposition of the emitted pollutants during transport from the emission point to the point of exposure.

8. What Must My Health-Based Eligibility Demonstration Contain?

(a) Your health-based eligibility demonstration must contain, at a minimum, the information specified in paragraphs (a)(1) through (6) of this section.

(1) Identification of each appropriate emission point at the affected source facility, including the maximum rated capacity of each appropriate emission point.

(2) Stack parameters for each appropriate emission point including, but not limited to, the parameters listed in paragraphs (a)(2)(i) through (iv) below:

(i) Emission release type.

(ii) Stack height, stack area, stack gas temperature, and stack gas exit velocity.

(iii) Plot plan showing all emission points, nearby residences, and fence line.

(iv) Identification of any control devices used to reduce emissions from each appropriate emission point.

(3) Emission test reports for each pollutant and appropriate emission point which has been tested using the test methods specified in Table 1 of this appendix, including a description of the process parameters identified as being worst case. Fuel analyses for each fuel and emission point which has been conducted including collection and analytical methods used.

(4) Identification of the RfC values used in your look-up table analysis or site-specific compliance demonstration.

(5) Calculations used to determine the HCl-equivalent or manganese emission rates according to sections 6(a) or (b) of this appendix.

(6) Identification of the controlling process factors (including, but not limited to, fuel type, heat input rate, type of control devices, process parameters reflecting the emissions rates used for your eligibility demonstration) that will become Federally enforceable permit conditions used to show that your facility remains eligible for the health-based compliance alternatives.

(b) If you use the look-up table analysis in section 6 of this appendix to demonstrate that your facility is eligible for either health-based compliance alternative, your eligibility demonstration must contain, at a minimum, the information in paragraphs (a) and (b)(1) through (3) of this section.

(1) Calculations used to determine the weighted average stack height of the subpart DDDDD emission points that emit manganese, HCl, or Cl₂.

(2) Identification of the subpart DDDDD emission point, that emits either manganese or HCl and Cl₂, with the minimum distance to the property boundary of the facility.

(3) Comparison of the values in the look-up tables (Tables 2 and 3 of this appendix) to your maximum HCl-equivalent or manganese emission rates.

(c) If you use a site-specific compliance demonstration as described in section 7 of this appendix to demonstrate that your facility is eligible, your eligibility demonstration must contain, at a minimum, the information in paragraphs (a) and (c)(1) through (7) of this section:

(1) Identification of the risk assessment methodology used.

(2) Documentation of the fate and transport model used.

(3) Documentation of the fate and transport model inputs, including the information described in paragraphs (a)(1) through (5) of this section converted to the dimensions required for the model and all of the following that apply: meteorological data; building, land use, and terrain data; receptor locations and population data; and other facility-specific parameters input into the model.

(4) Documentation of the fate and transport model outputs.

(5) Documentation of any exposure assessment and risk characterization calculations.

(6) Comparison of the HQ HI to the limit of 1.0.

(d) To be eligible for either health-based compliance alternative, the parameters that defined your affected source as eligible for the health-based compliance alternatives must be submitted to your permitting authority for incorporation into your title V permit, as federally enforceable limits, at the same time you submit your health-based eligibility demonstration. These parameters include, but are not limited to, fuel type, fuel mix (annual average), emission rate, type of control devices, process parameters (e.g., maximum heat input), and non-process parameters (e.g., stack height).

9. When Do I Have To Complete and Submit My Health-Based Eligibility Demonstration?

(a) If you have an existing affected source, you must complete and submit your eligibility demonstration to your permitting authority, along with a signed certification that the demonstration is an accurate depiction of your facility, no later than the date one year prior to the compliance date of subpart DDDDD. A separate copy of the eligibility demonstration must be submitted to: U.S. EPA, Risk and Exposure Assessment Group, Emission Standards Division (C404-01), Attn: Group Leader, Research Triangle Park, North Carolina 27711, electronic mail address *REAG@epa.gov*.

(b) If you have a new or reconstructed affected source that starts up before the effective date of subpart DDDDD, or an affected source that is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP before the effective date of subpart DDDDD, then you may submit an eligibility demonstration at any time after September 13, 2004 but you must comply with the emissions limits in table 1 to this subpart and all other requirements of subpart DDDDD until your eligibility demonstration is submitted to your permitting authority in accordance with the requirements of section 10 of this appendix.

(c) If you have a new or reconstructed affected source that starts up after the effective date of subpart DDDDD, or an affected source that is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP after the effective date for subpart DDDDD, then you must follow the schedule in paragraphs (c)(1) and (2) of this section.

(1) You must complete and submit a preliminary eligibility demonstration based on the information (e.g., equipment types, estimated emission rates, process and non-process parameters, reference values, etc.) that will be used to apply for your title V permit. This preliminary eligibility demonstration must be submitted with your application for approval of construction or reconstruction. You must base your preliminary eligibility demonstration on the maximum emissions allowed under your title V permit. If the preliminary eligibility demonstration indicates that your affected source facility is eligible for either compliance alternative, then you may start up your new affected source and your new affected source will be considered in compliance with the alternative standard and subject to the compliance requirements in this appendix.

(2) You must conduct the emission tests or analyses specified in section 4 of this appendix upon initial startup and use the results of these emissions tests to complete and submit your eligibility demonstration within 180 days following your initial startup date.

10. When Do I Become Eligible for the Health-Based Compliance Alternatives?

(a) For existing sources, new sources, or reconstructed sources that start up before the effective date of subpart DDDDD, or an affected source that is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP before the effective date of subpart DDDDD, you are eligible to comply with a health-based compliance alternative upon submission of a complete demonstration meeting all the requirements of paragraph 8 for the applicable alternative. However, your eligibility demonstration may be reviewed by the permitting authority or by EPA to verify that the demonstration meets the requirements of appendix A to this subpart and is technically sound (i.e. use of the look-up tables is appropriate or the site-specific assessment is technically valid). If you are notified by the permitting authority or by EPA of any deficiencies in your submission, then you are not eligible for the health-based compliance alternative until the permitting authority or EPA verifies that the deficiencies are corrected.

(b) For new or reconstructed sources that start up after the effective date of subpart DDDDD, you are eligible to comply with a the health-based compliance alternatives upon submission of a complete preliminary eligibility determination in accordance with paragraph (c)(1) of section 9 that demonstrates your affected source is eligible for the applicable alternative. You may then start up your source and conduct the necessary testing in accordance with paragraph (c)(2) of section 9. The eligibility demonstration submitted in accordance with paragraph (c)(2) of section 9 may be reviewed by the permitting authority or by EPA to verify that the demonstration meets the requirements of appendix A to this subpart and is technically sound (i.e. use of the look-up tables is appropriate or the site-specific assessment is technically valid). If you are notified in writing by the permitting authority of any deficiencies in your submission, then you have 30 days to correct the deficiencies unless the permitting authority agrees to extend this time to a period not to exceed 90 days. If the deficiencies are not corrected within the applicable time period, you will not be eligible for the health-based compliance alternative until the permitting authority verifies that the deficiencies are corrected.

(c) If the title V permit conditions requested in accordance with paragraph (d) of section 8 are disapproved by the permitting authority, then your affected source must comply with the applicable emission limits, operating limits, and work practice standards in subpart DDDDD by the compliance dates specified in §63.7495. Until the requested conditions (or alternative conditions meeting the requirements of paragraph (d) of section 8) are incorporated into the permit, compliance with the proposed conditions shall be considered compliance with the health-based alternative.

11. How Do I Ensure That My Facility Remains Eligible for the Health-Based Compliance Alternatives?

(a) You must update your eligibility demonstration and resubmit it each time that any of the parameters that defined your affected source as eligible for the health-based compliance alternatives changes in a way that could result in increased HAP emissions or increased risk from exposure to emissions. These parameters include, but are not limited to, fuel type, fuel mix (annual average), type of control devices, HAP emission rate, stack height, process parameters (e.g., heat input capacity), relevant reference values, and locations where people live).

(b) If you are updating your eligibility demonstration to account for an action in paragraph (a) of this section that is under your control (e.g. change in heat input capacity of your boiler), you must submit your revised eligibility demonstration to the permitting authority prior to making the change and revise your permit to incorporate the change. If your affected source is no longer eligible for the health-based compliance alternatives, then you must comply with the applicable emission limits, operating limits, and compliance requirements in subpart DDDDD prior to making the process change and revising your permit. If you are updating your eligibility demonstration to account for an action in paragraph (a) of this section that is outside of your control (e.g. change in a reference value), and that change causes your source to no longer be able to meet the criteria for the health-based compliance alternatives, your source must comply with the applicable emission limits, operating limits, and compliance requirements in subpart DDDDD within 3 years.

(c) Your revised eligibility demonstration may be reviewed by the permitting authority or EPA to verify that the demonstration meets the requirements of appendix A to this subpart and is technically sound (i.e. use of the look-up tables is appropriate or the site-specific assessment is technically valid). If you are notified by the permitting authority or EPA of any deficiencies in your submission, you will not remain eligible for the health-based compliance alternatives until the permitting authority or EPA verifies that the deficiencies are corrected.

12. What Records Must I Keep?

You must keep records of the information used in developing the eligibility demonstration for your affected source, including all of the information specified in section 8 of this appendix.

13. Definitions

The definitions in §63.7575 of subpart DDDDD apply to this appendix. Additional definitions applicable for this appendix are as follows:

Hazard Index (HI) means the sum of more than one hazard quotient for multiple substances and/or multiple exposure pathways.

Hazard Quotient (HQ) means the ratio of the predicted media concentration of a pollutant to the media concentration at which no adverse effects are expected. For inhalation exposures, the HQ is calculated as the air concentration divided by the RfC.

Look-up table analysis means a risk screening analysis based on comparing the HAP or HAP-equivalent emission rate from the affected source to the appropriate maximum allowable HAP or HAP-equivalent emission rates specified in Tables 2 and 3 of this appendix.

Reference Concentration (RfC) means an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime. It can be derived from various types of human or animal data, with uncertainty factors generally applied to reflect limitations of the data used.

Worst-case operating conditions means operation of an affected unit during emissions testing under the conditions that result in the highest HAP emissions or that result in the emissions stream composition (including HAP and non-HAP) that is most challenging for the control device if a control device is used. For example, worst-case conditions could include operation of an affected unit firing solid fuel likely to produce the most HAP.

Table 1 to Appendix B of Subpart DDDDD Emission Test Methods

For . . .	You must . . .	Using . . .
(1) Each subpart DDDDD emission point for which you choose to use a compliance alternative.	Select sampling ports' location and the number of traverse points.	Method 1 of 40 CFR part 60, appendix A.
(2) Each subpart DDDDD emission point for which you choose to use a compliance alternative.	Determine velocity and volumetric flow rate;	Method 2, 2F, or 2G in appendix A to 40 CFR part 60.
(3) Each subpart DDDDD emission point for which you choose to use a compliance alternative.	Conduct gas molecular weight analysis.	Method 3A or 3B in appendix A to 40 CFR part 60.
(4) Each subpart DDDDD emission point for which you choose to use a compliance alternative.	Measure moisture content of the stack gas.	Method 4 in appendix A to 40 CFR part 60.
(5) Each subpart DDDDD emission point for which you choose to use the HCl compliance alternative.	Measure the hydrogen chloride and chlorine emission concentrations.	Method 26 or 26A in appendix A to 40 CFR part 60.
(6) Each subpart DDDDD emission point for which you choose to use the TSM compliance alternative.	Measure the manganese emission concentration.	Method 29 in appendix A to 40 CFR part 60.
(7) Each subpart DDDDD emission point for which you choose to use a compliance alternative.	Convert emissions concentration to lb per MMBtu	Method 19 F-factor methodology in appendix A to

emission rates. part 60 of this chapter.

Table 2 to Appendix A of Subpart DDDDD Allowable Toxicity-Weighted Emission Rate Expressed in HCl Equivalents (lbs/hr)

Stack ht. (m)	Distance to property boundary (m)											
	0	50	100	150	200	250	500	1000	1500	2000	3000	5000
5.....	14.9	14.9	114.9	114.9	114.9	114.9	144.3	287.3	373.0	373.0	373.0	373.0
10...	188.5	188.5	188.5	188.5	188.5	188.5	195.3	328.0	432.5	432.5	432.5	432.5
20...	386.1	386.1	386.1	386.1	386.1	386.1	386.1	425.4	580.0	602.7	602.7	602.7
30...	396.1	396.1	396.1	396.1	396.1	396.1	396.1	436.3	596.2	690.6	807.8	816.5
40...	408.1	408.1	408.1	408.1	408.1	408.1	408.1	448.2	613.3	715.5	832.2	966.0
50...	421.4	421.4	421.4	421.4	421.4	421.4	421.4	460.6	631.0	746.3	858.2	1002.8
60...	435.5	435.5	435.5	435.5	435.5	435.5	435.5	473.4	649.0	778.6	885.0	1043.4
70...	450.2	450.2	450.2	450.2	450.2	450.2	450.2	486.6	667.4	813.8	912.4	1087.4
80..	465.5	465.5	465.5	465.5	465.5	465.5	465.5	500.0	685.9	849.8	940.9	1134.8
100.	497.5	497.5	497.5	497.5	497.5	497.5	497.5	527.4	723.6	917.1	1001.2	1241.3
200.	677.3	677.3	677.3	677.3	677.3	677.3	677.3	682.3	919.8	1167.1	1390.4	1924.6

Table 3 to Appendix A of Subpart DDDDD Allowable Manganese Emission Rate (lbs/hr)

Stack ht. (m)	Distance to property boundary (m)											
	0	50	100	150	200	250	500	1000	1500	2000	3000	5000
5...	0.29	0.29	0.29	0.29	0.29	0.29	0.36	0.72	0.93	0.93	0.93	0.94
10....	0.47	0.47	0.47	0.47	0.47	0.47	0.49	0.82	1.08	1.08	1.08	1.08
20....	0.97	0.97	0.97	0.97	0.97	0.97	0.97	1.06	1.45	1.51	1.51	1.51
30....	0.99	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.49	1.72	2.02	2.04
40....	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.12	1.53	1.79	2.08	2.42
50....	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.15	1.58	1.87	2.15	2.51
60....	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.18	1.62	1.95	2.21	2.61
70....	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.22	1.67	2.03	2.28	2.72
80....	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.25	1.71	2.12	2.35	2.84
100..	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.32	1.81	2.29	2.50	3.10
200..	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.71	2.30	2.92	3.48	4.81

D.14.4 One Time Deadlines Relating to Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD]

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

Requirement	Rule Cite	Affected Facility	Deadline
Initial Notification	40 CFR 63.7545(b) and 40 CFR 63.9(b)	Boilers 1, 2, 3, and 5	March 12, 2005
Initial Compliance Date	40 CFR 63.7495(b)	Boilers 1, 2, and 5	September 13, 2008 (Compliance date under 40 CFR 63.7465(b) is September 13, 2007. On October 19, 2006 Purdue University was granted an extension for the initial compliance date by IDEM, OAQ.)

SECTION E Nitrogen Oxides Budget Trading Program - NO_x Budget Permit for NO_x Budget Units Under 326 IAC 10-4-1(a)

ORIS Code: 50240

NO_x Budget Source [326 IAC 2-7-5(15)]

- (a) One (1) spreader stoker coal fired boiler, identified as Boiler 1, with installation completed in 1960, with a maximum capacity of 281 MMBtu/hr, with a multi-cyclone collector and an electrostatic precipitator for particulate matter control, exhausting to stack WADE 01. Boiler 1 has two (2) auxiliary natural gas fired burners rated at 35 MMBtu/hr per burner, used for ignition and flame stabilization periods. Boiler 1 has a continuous emissions monitoring system (CEMS) for nitrogen oxides (NO_x) and a continuous opacity monitor (COM).

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR 63, Subpart DDDDD), Boiler 1 is considered an existing affected source. Boiler 1 is categorized under the large solid fuel subcategory.

- (b) One (1) spreader stoker coal fired boiler, identified as Boiler 2, with installation completed in 1967, with a maximum capacity of 274 MMBtu/hr, with a multi-cyclone collector and an ESP or a multi-compartment baghouse for particulate matter control, exhausting to stack WADE 02. Boiler 2 has two (2) auxiliary natural gas fired burners rated at 35 MMBtu/hr per burner, used for ignition and flame stabilization periods. Boiler 2 has a continuous emissions monitoring system (CEMS) for nitrogen oxides (NO_x) and a continuous opacity monitor (COM).

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR 63, Subpart DDDDD), Boiler 2 is considered an existing affected source. Boiler 2 is categorized under the large solid fuel subcategory.

- (c) One (1) circulating fluidized bed coal fired boiler, identified as Boiler 5, with installation completed in 1991, with a design capacity of 279 MMBtu/hr, with a baghouse for particulate matter control and limestone injection for sulfur dioxide control, combusting natural gas for ignition, exhausting to stack WADE 05. Boiler 5 has continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and a continuous opacity monitor (COM).

Under the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (40 CFR 63, Subpart DDDDD), Boiler 5 is considered an existing affected source. Boiler 5 is categorized under the large solid fuel subcategory.

Under the Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units NSPS (40 CFR 60, Subpart Db), Boiler 5 is considered an affected source.

- (d) One (1) natural gas and distillate fuel oil fired boiler, identified as Boiler 3, with installation started in 1973 or 1974 and completed in 1974, with a maximum capacity of 163,000 pounds of steam/216 MMBtu/hr, exhausting to stack WADE 03. Boiler 3 has a continuous emissions monitoring system (CEMS) for nitrogen oxides (NO_x).

Under the Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units NSPS (40 CFR 60, Subpart D), Boiler 3 is considered an affected source.

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

E.1 Automatic Incorporation of Definitions [326 IAC 10-4-7(e)]

This NO_x budget permit is deemed to incorporate automatically the definitions of terms under 326 IAC 10-4-2.

E.2 Standard Permit Requirements [326 IAC 10-4-4(a)]

- (a) The owners and operators of the NO_x budget source and each NO_x budget unit shall operate each unit in compliance with this NO_x budget permit.
- (b) The NO_x budget units subject to this NO_x budget permit include the following: Boiler 1, Boiler 2, Boiler 5, and Boiler 3.

E.3 Monitoring Requirements [326 IAC 10-4-4(b)]

- (a) The owners and operators and, to the extent applicable, the NO_x authorized account representative of the NO_x budget source and each NO_x budget unit at the source shall comply with the monitoring requirements of 40 CFR 75 and 326 IAC 10-4-12.
- (b) The emissions measurements recorded and reported in accordance with 40 CFR 75 and 326 IAC 10-4-12 shall be used to determine compliance by each unit with the NO_x budget emissions limitation under 326 IAC 10-4-4(c) and Condition E.4, Nitrogen Oxides Requirements.

E.4 Nitrogen Oxides Requirements [326 IAC 10-4-4(c)]

- (a) The owners and operators of the NO_x budget source and each NO_x budget unit at the source shall hold NO_x allowances available for compliance deductions under 326 IAC 10-4-10(j), as of the NO_x allowance transfer deadline, in each unit's compliance account and the source's overdraft account in an amount:
 - (1) Not less than the total NO_x emissions for the ozone control period from the unit, as determined in accordance with 40 CFR 75 and 326 IAC 10-4-12;
 - (2) To account for excess emissions for a prior ozone control period under 326 IAC 10-4-10(k)(5); or
 - (3) To account for withdrawal from the NO_x budget trading program, or a change in regulatory status of a NO_x budget opt-in unit.
- (b) Each ton of NO_x emitted in excess of the NO_x budget emissions limitation shall constitute a separate violation of the Clean Air Act (CAA) and 326 IAC 10-4.
- (c) Each NO_x budget unit shall be subject to the requirements under (a) above and 326 IAC 10-4-4(c)(1) starting on May 31, 2004.
- (d) NO_x allowances shall be held in, deducted from, or transferred among NO_x allowance tracking system accounts in accordance with 326 IAC 10-4-9 through 11, 326 IAC 10-4-13, and 326 IAC 10-4-14.
- (e) A NO_x allowance shall not be deducted, in order to comply with the requirements under (a) above and 326 IAC 10-4-4(c)(1), for an ozone control period in a year prior to the year for which the NO_x allowance was allocated.

- (f) A NO_x allowance allocated under the NO_x budget trading program is a limited authorization to emit one (1) ton of NO_x in accordance with the NO_x budget trading program. No provision of the NO_x budget trading program, the NO_x budget permit application, the NO_x budget permit, or an exemption under 326 IAC 10-4-3 and no provision of law shall be construed to limit the authority of the U.S. EPA or IDEM, OAQ to terminate or limit the authorization.
- (g) A NO_x allowance allocated under the NO_x budget trading program does not constitute a property right.
- (h) Upon recordation by the U.S. EPA under 326 IAC 10-4-10, 326 IAC 10-4-11, or 326 IAC 10-4-13, every allocation, transfer, or deduction of a NO_x allowance to or from each NO_x budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, this NO_x budget permit of the NO_x budget unit by operation of law without any further review.

E.5 Excess Emissions Requirements [326 IAC 10-4-4(d)]

The owners and operators of each NO_x budget unit that has excess emissions in any ozone control period shall do the following:

- (a) Surrender the NO_x allowances required for deduction under 326 IAC 10-4-10(k)(5).
- (b) Pay any fine, penalty, or assessment or comply with any other remedy imposed under 326 IAC 10-4-10(k)(7).

E.6 Record Keeping Requirements [326 IAC 10-4-4(e)] [326 IAC 2-7-5(3)]

Unless otherwise provided, the owners and operators of the NO_x budget source and each NO_x budget unit at the source shall keep, either on site at the source or at a central location within Indiana for those owners or operators with unattended sources, each of the following documents for a period of five (5) years:

- (a) The account certificate of representation for the NO_x authorized account representative for the source and each NO_x budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 326 IAC 10-4-6(h). The certificate and documents shall be retained either on site at the source or at a central location within Indiana for those owners or operators with unattended sources beyond the five (5) year period until the documents are superseded because of the submission of a new account certificate of representation changing the NO_x authorized account representative.
- (b) All emissions monitoring information, in accordance with 40 CFR 75 and 326 IAC 10-4-12, provided that to the extent that 40 CFR 75 and 326 IAC 10-4-12 provide for a three (3) year period for record keeping, the three (3) year period shall apply.
- (c) Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_x budget trading program.
- (d) Copies of all documents used to complete a NO_x budget permit application and any other submission under the NO_x budget trading program or to demonstrate compliance with the requirements of the NO_x budget trading program.

This period may be extended for cause, at any time prior to the end of five (5) years, in writing by IDEM, OAQ or the U.S. EPA. Records retained at a central location within Indiana shall be available immediately at the location and submitted to IDEM, OAQ or U.S. EPA within three (3) business days following receipt of a written request. Nothing in 326 IAC 10-4-4(e) shall alter the record retention requirements for a source under 40 CFR 75. Unless otherwise provided, all records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

E.7 Reporting Requirements [326 IAC 10-4-4(e)]

- (a) The NO_x authorized account representative of the NO_x budget source and each NO_x budget unit at the source shall submit the reports and compliance certifications required under the NO_x budget trading program, including those under 326 IAC 10-4-8, 326 IAC 10-4-12, or 326 IAC 10-4-13.
- (b) Pursuant to 326 IAC 10-4-6(e), each submission shall include the following certification statement by the NO_x authorized account representative: "I am authorized to make this submission on behalf of the owners and operators of the NO_x budget sources or NO_x budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."
- (c) Where 326 IAC 10-4 requires a submission to IDEM, OAQ, the NO_x authorized account representative shall submit required information to:

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

- (d) Where 326 IAC 10-4 requires a submission to U.S. EPA, the NO_x authorized account representative shall submit required information to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue, NW
Mail Code 6204N
Washington, DC 20460

E.8 Liability [326 IAC 10-4-4(f)]

The owners and operators of each NO_x budget source shall be liable as follows:

- (a) Any person who knowingly violates any requirement or prohibition of the NO_x budget trading program, a NO_x budget permit, or an exemption under 326 IAC 10-4-3 shall be subject to enforcement pursuant to applicable state or federal law.
- (b) Any person who knowingly makes a false material statement in any record, submission, or report under the NO_x budget trading program shall be subject to criminal enforcement

pursuant to the applicable state or federal law.

- (c) No permit revision shall excuse any violation of the requirements of the NO_x budget trading program that occurs prior to the date that the revision takes effect.
- (d) Each NO_x budget source and each NO_x budget unit shall meet the requirements of the NO_x budget trading program.
- (e) Any provision of the NO_x budget trading program that applies to a NO_x budget source, including a provision applicable to the NO_x authorized account representative of a NO_x budget source, shall also apply to the owners and operators of the source and of the NO_x budget units at the source.
- (f) Any provision of the NO_x budget trading program that applies to a NO_x budget unit, including a provision applicable to the NO_x authorized account representative of a NO_x budget unit, shall also apply to the owners and operators of the unit. Except with regard to the requirements applicable to units with a common stack under 40 CFR 75 and 326 IAC 10-4-12, the owners and operators and the NO_x authorized account representative of one (1) NO_x budget unit shall not be liable for any violation by any other NO_x budget unit of which they are not owners or operators or the NO_x authorized account representative and that is located at a source of which they are not owners or operators or the NO_x authorized account representative.

E.9 Effect on Other Authorities [326 IAC 10-4-4(g)]

No provision of the NO_x budget trading program, a NO_x budget permit application, a NO_x budget permit, or an exemption under 326 IAC 10-4-3 shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NO_x authorized account representative of a NO_x budget source or NO_x budget unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the CAA.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Purdue University
Source Address: 401 S. Grant Street, 1665 L.J. Freehafer Hall of Administrative Services,
West Lafayette, Indiana, 47907-1665
Mailing Address: 401 S. Grant Street, 1665 L.J. Freehafer Hall of Administrative Services,
West Lafayette, Indiana, 47907-1665
Part 70 Permit No.: T157-7340-00012

**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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Purdue University
Source Address: 401 S. Grant Street, 1665 L.J. Freehafer Hall of Administrative Services,
West Lafayette, Indiana, 47907-1665
Mailing Address: 401 S. Grant Street, 1665 L.J. Freehafer Hall of Administrative Services,
West Lafayette, Indiana, 47907-1665
Part 70 Permit No.: T157-7340-00012

This form consists of 2 pages

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<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

Boiler 1 and 2 Natural Gas Usage - Quarterly Report

Source Name: Purdue University
Emission Unit Location: Wade Powerhouse, West Lafayette, IN
Mailing Address: 401 S. Grant Street, 1665 L.J. Freehafer Hall of Administrative Services, West Lafayette, Indiana, 47907-1665
Source Modification No.: 157-10906-00012
Facility: Boiler 1 and Boiler 2 - natural gas-fired burners
Parameter: natural gas usage
Limit: not more than 395 MMCF per 12 consecutive month period

YEAR:

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

No deviation occurred in this quarter.

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

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Telephone: _____

Attach a signed certification to complete this report.

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

Fuel Oil-Fired Electric Generator (BSG) Quarterly Report

Source Name: Purdue University
Emission Unit Location: Wade Powerhouse, West Lafayette, IN
Mailing Address: 401 S. Grant Street, 1665 L.J. Freehafer Hall of Administrative Services, West Lafayette, Indiana, 47907-1665
Source Modification No.: 157-10906-00012
Facility: 17.7 MMBtu/hr electric generator, BSG
Parameter: no. 2 fuel oil usage
Limit: less than 113,000 gallons per 12 consecutive month period

YEAR:

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

No deviation occurred in this quarter.

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

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Telephone: _____

Attach a signed certification to complete this report.

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

Boiler 3 Fuel Usage Limit - Quarterly Report

Source Name: Purdue University
Emission Unit Location: Wade Powerhouse, West Lafayette, IN
Mailing Address: 401 S. Grant Street, 1665 L.J. Freehafer Hall of Administrative Services,
West Lafayette, Indiana, 47907-1665
Permit Modification No.: 157-19509-00012
Facility: 286 MMBtu/hr Boiler (Boiler 3)
Parameter: distillate fuel oil usage (opacity)
Limit: The usage of distillate fuel oil in Boiler 3 shall be limited to 500,000 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:

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

9 No deviation occurred in this quarter.

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

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Telephone: _____

Attach a signed certification to complete this report.

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

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

Source Name: Purdue University
Source Address: 401 S. Grant Street, 1665 L.J. Freehafer Hall of Administrative Services,
West Lafayette, Indiana, 47907-1665
Mailing Address: 401 S. Grant Street, 1665 L.J. Freehafer Hall of Administrative Services,
West Lafayette, Indiana, 47907-1665
Part 70 Permit No.: T157-7340-00012

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.