INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: November 19, 2012

RE: NIPSCO - Michigan City Generating Station/091-29806-00021

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

Notice of Decision: Approval – Effective Immediately

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

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

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

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

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

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

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

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

Enclosures
FNTVOP.dot12/3/07

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Part 70 Operating Permit Renewal
OFFICE OF AIR QUALITY

Northern Indiana Public Service Company - Michigan City Generating Station
101 Wabash Street
Michigan City, Indiana 46360

(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.: T 091-29806-00021	
Issued by: Tripurari Sinha Tripurari P. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: November 19, 2012 Expiration Date: November 19, 2017

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

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary stationary utility electric generating station.

Source Address:	101 Wabash Street, Michigan City, Indiana 46360
General Source Phone Number:	219-647-5252
SIC Code:	4911
County Location:	LaPorte
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Rules Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

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

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

(a) One (1) cyclone coal-fired boiler, identified as Boiler 12, with a design heat input capacity of 4650 million Btu per hour (MMBtu/hr), with construction completed in May 1974, with an electrostatic precipitator (ESP) with a flue gas conditioning (FGC) system for control of particulate matter, exhausting to Stack 4. Natural gas can be fired during startup, shutdown, and malfunctions. Boiler 12 has a selective catalytic reduction (SCR) system for NO_X control, and has continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system.

(c) One (1) natural gas-fired auxiliary boiler, identified as AUX1, rated at 109 million Btu per hour (MMBtu/hr), installed in 2003, equipped with low NO_X burners, exhausting to Stack AUX1, with a continuous emissions monitoring system (CEMS) for nitrogen oxides (NO_X).

(d) A coal storage and handling system for Boiler 12, completed before May 1974.

(1) One (1) railcar unloading station with particulate emissions controlled by wet suppression and partial enclosure, with a maximum throughput of 1500 tons of coal per hour.

(2) An enclosed conveyor system to the coal storage pile(s), with the transfer points underground or enclosed by buildings. A telescoping chute is used to drop coal to the storage pile(s).

(3) Coal storage pile(s) and coal pile reclaim, with fugitive dust emissions controlled by compaction and wet suppression.

(4) Coal conveyors and the coal junction house, with carryover wet suppression, additional wet suppression and/or foam application, and enclosed transfer points.

(5) One coal conveyor, constructed in 1974 and reconstructed in 2009, identified as C08, with a maximum capacity of 1000 tons per hour, using carryover wet suppression. [40 CFR 60, Subpart Y]

(6) Coal crusher house, with a baghouse, identified as CHDC, for PM control, with carryover wet suppression for PM control and enclosed transfer points within an enclosure for ancillary dust control.

(7) Coal sample house/breaker building with a baghouse, identified as SHDC, for PM control, with carryover wet suppression for PM control and enclosed transfer points within an enclosure for ancillary dust control.

(8) Coal tripper floor to coal bunkers, with a baghouse, identified as TFDC, for PM control, with enclosure for ancillary dust control.

(e) Dry fly ash handling, installed in 1997, including the following:

(1) Vacuum conveyance of fly ash to a storage silo with particulate emissions controlled by a bin vent filter, with a design throughput rate of 9.3 tons per hour.

(2) One (1) enclosed fly ash silo unloading station with a design unloading capacity of 200+ tons per hour, used to load dry fly ash to covered trucks, with particulate emissions controlled by the use of a telescoping chute with a vacuum system and a bin vent filter. Overhead doors with an interlock system are closed when ash trucks are being loaded.

(f) Wet process bottom ash handling installed in approximately 1950, with bottom ash sluiced to storage pond(s), with water cover or vegetation sufficient to prevent ash re-entrainment. Ash removed from the pond(s) is stored in piles before being taken offsite by truck.

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

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

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

(1) One (1) 480,000 BTU boiler in the "A" Building, installed in 1970 [326 IAC 6-2];
(2) One (1) 480,000 BTU boiler in the Gate House, installed in 1964, [326 IAC 6-2];
(3) One (1) 297,000 BTU boiler, installed in 1953 in the Relay House (Substation Bldg. #G15), each used for building heat. [326 IAC 6-2]

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

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

(d) 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 (100°F) or;

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

(e) Conveyors as follows: Underground conveyors. [326 IAC 6-3]

(f) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6-3]

(g) 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]

(h) Vents from ash transport systems not operated at positive pressure. [326 IAC 6-3]

(i) Source-wide paved roads (vehicle traffic). [326 IAC 6-4]

(j) Coal pile wind erosion. [326 IAC 6-4]

(k) Ponded bottom ash handling and removal. [326 IAC 6-4]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

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

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

(c) It is an affected source under Title IV (Acid Deposition Control) of the Clean Air Act, as defined in 326 IAC 2-7-1(3).

SECTION B GENERAL CONDITIONS

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

(a) 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) Notwithstanding B.1(a), the terms located in paragraphs of the Decree that are incorporated by reference into this permit in accordance with Section F and Attachment A shall have the definition, and only the definition, assigned to such terms in the Decree and are limited to Section F and Attachment A.

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, T 091-29806-00021, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit or of permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]

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

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

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

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

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

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

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

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

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

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

(1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(34), and

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

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

(c) A "responsible official" is defined at 326 IAC 2-7-1(34).

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

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

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

and

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

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

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

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

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

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

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

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

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

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

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

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices. “Identification” does not require listing of the individual by his or her name;

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

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

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

The Permittee shall implement the PMP(s) required by a specific condition(s) in Section D of this permit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ within a reasonable time upon request by IDEM, 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 specified in this permit. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

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

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

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

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

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

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865
Northwest Regional Office phone: (219) 757-0265; fax: (219) 757-0267.

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

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

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

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

(A) A description of the emergency;

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

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(8) be revised in response to an emergency.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(a) All terms and conditions of permits established prior to T 091-29806-00021 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 combined permit, all previous registrations and permits are superseded by this combined new source review and part 70 operating permit, except for permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control)

B.14 Reserved

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

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

(1) That this permit contains a material mistake.

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

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

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

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

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

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

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

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

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

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

B.17 Source Modification Requirements [326 IAC 1-2-42][326 IAC 2-7-10.5][326 IAC 2-2-2] [326 IAC 2-3-2]

(a) The Permittee shall obtain approval as required by 326 IAC 2-7-10.5 from the IDEM, OAQ prior to making any modification to the source:

(b) Any application requesting a source modification shall be submitted to:

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

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee shall also comply with the applicable provisions of 326 IAC 2-7-11 (Administrative Permit Amendments) or 326 IAC 2-7-12 (Permit Modification) prior to operating the approved modification.

(d) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2-2 and 326 IAC 2-3-2.

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) Pursuant to 326 IAC 2-7-11(b) and 326 IAC 2-7-12(a), administrative Part 70 operating permit amendments and permit modifications for purposes of the acid rain portion of a Part 70 permit shall be governed by regulations promulgated under Title IV of the Clean Air Act. [40 CFR 72]

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

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

Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(d) 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 or notice shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

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

B.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) or (c) without a prior permit revision, if each of the following conditions is met:

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

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

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

(4) The Permittee notifies the:

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

and

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

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

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

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

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

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

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

(3) Any change in emissions; and

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

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(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). The notification requirement per this condition does not apply to emission trades of SO_2 or NO_X under 326 IAC 21 or 326 IAC 10-4, or other emission trading programs established by 326 IAC or federal emission trading programs.

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

(f) This condition, B.20 does not apply to emission trades of SO_2 or NO_X under 326 IAC 21 or 326 IAC 10-4, or other emission trading programs established by 326 IAC or federal emission trading programs.

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

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

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

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

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

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

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

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

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

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

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

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

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

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

B.24 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.

B.25 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).

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

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

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

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

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

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

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

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

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

C.6 Reserved

C.7 Stack Height [326 IAC 1-7]

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

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

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

C.9 Performance Testing [326 IAC 3-6]

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual performance test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all performance test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

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

C.11 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)] [40 CFR 64][326 IAC 3-8]

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

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

C.12 Reserved

C.13 Reserved

C.14 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall 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.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

(a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.16 Risk Management Plan [326 IAC 2-7-5(11)] [40 CFR 68]

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

C.17 Response to Excursions or Exceedances [326 IAC 2-7-5][326 IAC 2-7-6][40 CFR 64][326 IAC 3-8]

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

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

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and to the extent practicable, to restore normal or usual operation and prevent the likely recurrence of the cause of the excursion (other than those caused by excused startup or shutdown conditions). The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

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

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

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

(1) monitoring results;

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

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

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

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

(II)

(a) CAM Response to excursions or exceedances.

(1) Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit

(including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(2) Determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

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

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

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

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

(f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(a)(2) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:
(1) Failed to address the cause of the control device performance problems; or
(2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

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

(h) CAM recordkeeping requirements.

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

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

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

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

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

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

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

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

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) (“Regulated pollutant, which is used only for purposes of Section 19 of this rule”) from the source, for purposes of Part 70 fee assessment.

The statement must be submitted to:

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

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following:
    (AA) All calibration and maintenance records.
    (BB) All original strip chart recordings for continuous monitoring instrumentation.
    (CC) Copies of all reports required by the Part 70 permit.

    Records of required monitoring information include the following:
    (AA) The date, place, as defined in this permit, and time of sampling or measurements.
    (BB) The dates analyses were performed.
    (CC) The company or entity that performed the analyses.
    (DD) The analytical techniques or methods used.
    (EE) The results of such analyses.
    (FF) The operating conditions as existing at the time of sampling or measurement.

    These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

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

(c) If there is a reasonable possibility (as defined in 326 IAC 2-2-8(b)(6) that a “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

    (1) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) 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(pp)(2)(A)(iii) and/or 326 IAC 2-3-1 (kk)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(d) If there is a reasonable possibility (as defined in 326 IAC 2-2-8(b)(6) that a "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

(1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in 326 IAC 2-2-8(b)(1)(B) ; and

(2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [326 IAC 2-3] [40 CFR 64][326 IAC 3-8]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to any future applicable requirement arising independently of this permit, not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). A deviation is a failure to comply with a requirement of the permit.

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

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

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

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

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

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

(b) The address for report submittal is:

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

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

(d) 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.

(e) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C – General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll) at an existing electric utility steam generating unit (EUSGU), the Permittee shall submit a report to the department within sixty (60) days after the end of each year during which records must be generated under subdivision (3) [326 IAC 2-2-8(b)(3)] setting out the unit's annual emissions during the calendar year that preceded submission of the report.

(f) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (oo) and/or 326 IAC 2-3-1 (jj)) at an existing Non-EGSU emissions unit, and the project meets the following criteria, then the Permittee shall submit a report for that project 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 (ww) and/or 326 IAC 2-3-1 (pp), for that regulated NSR pollutant, and

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

(g) The report for project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:

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

(2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.

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

(4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

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

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

Stratospheric Ozone Protection

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

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

Ambient Monitoring Requirements [326 IAC 7-3]

C.23 Ambient Monitoring [326 IAC 7-3]

(a) The Permittee shall operate continuous ambient sulfur dioxide air quality monitors and a meteorological data acquisition system according to a monitoring plan submitted to the commissioner for approval. The monitoring plan shall include requirements listed in 326 IAC 7-3-2(a)(1), 326 IAC 7-3-2(a)(2) and 326 IAC 7-3-2(a)(3).

(b) The Permittee and other operators subject to the requirements of 326 IAC 7-3-2, located in the same county, may submit a joint monitoring plan to satisfy the requirements of this rule. [326 IAC 7-3-2(c)]

(c) The Permittee may petition the commissioner for an administrative waiver of all or some of the requirements of 326 IAC 7-3 if such owner or operator can demonstrate that ambient monitoring is unnecessary to determine continued maintenance of the sulfur dioxide ambient air quality standards in the vicinity of the source. [326 IAC 7-3-2(d)]

SECTION D.1 Reserved

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emission Unit Description

(b) One (1) cyclone coal-fired boiler, identified as Boiler 12, with a design heat input capacity of 4650 million Btu per hour (MMBtu/hr), with construction completed in May 1974, with an electrostatic precipitator (ESP) with a flue gas conditioning (FGC) system for control of particulate matter, exhausting to Stack 4. Natural gas can be fired during startup, shutdown, and malfunctions. Boiler 12 has a selective catalytic reduction (SCR) system for NO_X control, and has continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system.

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

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

D.2.1 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: Emission limitations for facilities specified in 326 IAC 6-2-1(c)), the PM emissions from Boiler 12 shall not exceed 0.24 pound per million Btu heat input (lb/MMBtu). This limitation was calculated using 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 = 0.8, for Q greater than 1,000 MMBtu/hr heat input.
H = Stack height in feet.

Pursuant to 326 IAC 6-2-3(b), the emission limitations for those indirect heating facilities which began operation after June 8, 1972, and before September 21, 1983, shall be calculated using the above equation where Q, N, and h shall include the parameters for the facility in question and for those facilities which were previously constructed.

D.2.2 Temporary Alternative Opacity Limitations [326 IAC 5-1-3]

(a) Pursuant to 326 IAC 5-1-3(e) (Temporary Alternative Opacity Limitations), the following applies:

(1) When building a new fire in a boiler, opacity may exceed the applicable limit established in 326 IAC 5-1-2 for a period not to exceed a cumulative total of sixty (60) minutes (ten (10) six (6)-minute averaging periods) during the startup period, or until the flue gas temperature reaches two hundred fifty (250) degrees Fahrenheit at the inlet of the electrostatic precipitator, whichever occurs first.

(2) When shutting down a boiler, opacity may exceed the applicable limit established in 326 IAC 5-1-2 for a period not to exceed a cumulative total of sixty (60) minutes (ten (10) six (6)-minute averaging periods) during the shutdown period.

(3) Operation of the electrostatic precipitator is not required during these times.

(b) 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)]

(c) If a facility cannot meet the opacity limitations of 326 IAC 5-1-3(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.2.3 Sulfur Dioxide (SO_2) [326 IAC 7-4-5]

Pursuant to 326 IAC 7-4-5(4) (LaPorte County sulfur dioxide emission limitations), the SO_2 emissions from Boiler 12 shall not exceed 6.0 lbs/MMBtu, based on a 30-day rolling weighted average pursuant to 326 IAC 7-2-1.

Compliance Determination Requirements

D.2.4 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, compliance with the PM limitation in Condition D.2.1 shall be determined by a performance stack test conducted using Method 5 or other methods as approved by the Commissioner. This testing shall be repeated by December 31 of every second calendar year following this valid compliance demonstration. Section C - Performance Testing contains the Permittee's obligation with regard to the testing required by this condition.

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

D.2.4.1 Continuous Opacity Monitoring [326 IAC 3-5][40 CFR Part 75] [40 CFR 64]

(a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), the Permittee shall install calibrate, certify, operate, and maintain all necessary continuous opacity monitoring systems (COMS) and related equipment for measuring opacity, which meet all applicable performance specifications of 326 IAC 3-5-2. 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 time and reason of the breakdown and efforts made to correct the problem.

(d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a COMS pursuant to 326 IAC 3-5, 40 CFR 60 and/or 40 CFR 63.

D.2.5 Operation of Electrostatic Precipitator [326 IAC 2-7-6(6)] [40 CFR 64]

Except as otherwise provided by statute or rule or in this permit, the electrostatic precipitator (ESP) shall be operated at all times that Boiler 12 is firing coal.

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

(a) Pursuant to 326 IAC 3-5-1(d) (Continuous Monitoring of Emissions), the Permittee shall install, calibrate, certify, operate, and maintain continuous emission monitoring system(s) (CEMS) and related equipment for measuring SO_2 and NO_X emissions rates in lbs/MMBtu from Boilers 12, in accordance with 326 IAC 3-5-2 and 326 IAC 3-5-3.

(b) The continuous emissions monitoring system*(s)* (CEMS) for SO_2 and NO_X emission rates shall be operated at all times the emissions unit or process is operating except for reasonable periods of monitor system downtime due to necessary calibration, maintenance activities or malfunctions. Calibration and maintenance activities shall be conducted pursuant to the standard operating procedures under 326 IAC 3-5-4(a). [326 IAC 2-7-5(3)(A)(iii)] [326 IAC 3-5]

(c) All CEMS required by this permit shall meet all applicable performance specifications of 40 CFR 60 or any other applicable performance specifications, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.

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

(e) 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 7-4, 40 CFR 60, and/or 40 CFR 75.

D.2.7 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 6.0 lbs/MMBtu, using a thirty (30) day rolling weighted 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 3-7-3, 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.

(3) 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) 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(f)]

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

D.2.8 Transformer-Rectifier (T-R) Sets [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

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

(b) Reasonable response steps shall be taken in accordance with Section C - Response to Excursions or Exceedances whenever the percentage of T-R sets in service falls below ninety percent (90%). T-R set failure resulting in less than ninety percent (90%) availability 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.2.9 Opacity Readings [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] [40 CFR 64]

(a) In the event of emissions exceeding thirty-five percent (35%) 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 thirty-five percent (35%). Examples of expected response steps include, but are not limited to, boiler loads being reduced and ESP T-R sets being returned to service.

(b) Opacity readings in excess of thirty-five percent (35%) 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) The Permittee may request that the IDEM, OAQ approve a different opacity trigger level than the one specified in (a) and (b) of this condition, provided the Permittee can demonstrate, through stack testing or other appropriate means, that a different opacity trigger level is appropriate for monitoring compliance with the applicable particulate matter mass emission limits.

D.2.10 SO_2 Monitoring System Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

(a) Whenever the primary and back-up SO_2 continuous emission monitoring systems are malfunctioning or down for repairs or adjustments for less than twenty-four (24) hours, the Permittee shall substitute an average of the quality-assured data from the hour immediately before and the hour immediately after the missing data period for each hour of missing data.

(b) Whenever both the primary and back-up SO_2 continuous emission monitoring systems are malfunctioning or down for repairs or adjustments for twenty-four (24) hours or more, the following shall be used to provide information related to SO_2 emissions: Either fuel sampling shall and fuel sample preparation and analysis shall be conducted as specified in 326 IAC 3-7-2(a) and (c), 326 IAC 3-7-2(d), and 326 IAC 3-7-2(e), or, alternatively, a portable analyzer properly calibrated according to manufacturer specifications (such as manufacturer operating or maintenance manuals), shall be used to monitor SO_2 missions. Pursuant to 326 IAC 3-7-3, other manual or 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.

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

D.2.11 Record Keeping Requirements

(a) To document the compliance status with Section C - Opacity, Section C - Maintenance of Continuous Opacity Monitoring Equipment, and the particulate matter and opacity requirements in Conditions D.2.1, D.2.2, D.2.6, D.2.6a, D.2.8, and D.2.9, 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.2.1 and D.2.2.

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

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

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

(4) All ESP parametric monitoring readings.

(b) To document the compliance status with SO_2 Conditions D.2.3, D.2.7, and D.2.10, the Permittee shall maintain records in accordance with (1) or (2) below. Records shall be complete and sufficient to establish compliance with the SO_2 limit as required in Conditions D.2.3 and D.2.7.

(1) If the Permittee routinely uses fuel sampling and analysis pursuant to 326 IAC 7-2-1, then records shall be maintained in accordance with (A) and (B), below.

(A) All fuel sampling and analysis data, pursuant to 326 IAC 7-2, and data collected in accordance with Condition D.2.10.

(B) Actual fuel usage since last compliance determination period.

(2) If the Permittee routinely uses SO_2 continuous emission monitoring pursuant to 326 IAC 7-2-1(g), then records shall be maintained in accordance with (A), (B), and (C), below.

(A) All SO_2 continuous emissions monitoring data, pursuant to 326 IAC 3-5-6 and 326 IAC 7-2-1(g).

(B) All fuel sampling and analysis data or portable analyzer data collected for SO_2 CEMS downtime, in accordance with Condition D.2.10.

(C) Actual fuel usage during each SO_2 CEMS downtime to the extent that data is required to be collected under Condition D.2.10.

(c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.2.12 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 a "responsible official" as defined by 326 IAC 2-7-1(34).

(b) Pursuant to 326 IAC 7-2-1, the Permittee shall submit reports in accordance with (1) or (2) below.

(1) If the Permittee routinely uses fuel sampling and analysis pursuant to 326 IAC 7-2-1, a quarterly report of the thirty (30) day rolling weighted average sulfur dioxide emission rate in pounds per million Btus, and records of the daily average coal sulfur content, coal heat content, weighing factor, and daily average sulfur dioxide emission rate in pounds per million Btus 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)(1)]

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

(2) If the Permittee routinely uses SO_2 continuous emission monitoring pursuant to 326 IAC 7-2-1(g), a quarterly summary of the information to document compliance with Conditions D.2.3 and D.2.6 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 a "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-5-7(5), reporting of continuous monitoring system instrument downtime, except for zero (0) and span checks, which shall be reported separately, shall include the following:

(1) Date of downtime.

(2) Time of commencement.

(3) Duration of each downtime.

(4) Reasons for each downtime.

(5) Nature of system repairs and adjustments.

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

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(c) One (1) natural gas-fired auxiliary boiler, identified as AUX1, rated at 109 million Btu per hour (MMBtu/hr), installed in 2003, equipped with low NO_X burners, exhausting to Stack AUX1, with a continuous emissions monitoring system (CEMS) for nitrogen oxides (NO_X).

(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 Reserved

D.3.2 PSD Minor Limitation [326 IAC 2-1.1-5] [326 IAC 2-2]

The NO_X emissions from the auxiliary boiler (AUX1) shall be less than 40 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit shall render the requirements of PSD (326 IAC 2-2) not applicable to the auxiliary boiler (AUX1).

D.3.3 Reserved

D.3.4 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emissions Limitations for Facilities Constructed after September 21, 1983) the particulate emissions from the one (1) auxiliary boiler, shall be limited to 0.112 pound per million British thermal units heat input. This limitation is based on the following equation:

$$Pt = 1.09/Q^{0.26}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input.

D.3.5 Temporary Alternative Opacity Limitations [326 IAC 5-1-3]

Pursuant to 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), the following applies:

(a) When building a new fire in a boiler, or shutting down a boiler, opacity may exceed the forty percent (40%) opacity limit established in 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 forty percent (40%) 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.3.6 Reserved

D.3.7 Reserved

D.3.8 Reserved

Compliance Determination Requirements

D.3.9 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 12] [40 CFR 60, Subpart Db]

(a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions) and 60.48b (for Subpart Db), a continuous emissions monitoring system (CEMS) shall be calibrated, maintained, and operated for measuring NO_X and either CO_2 or O_2 from Stack AUX1 which meets the performance specifications of 326 IAC 3-5-2 and 3-5-3.

(b) Pursuant to 326 IAC 3-5-1(d)(1), the Permittee is required to use a CEMS to demonstrate compliance with Condition D.3.2 as allowed under the Clean Air Act and 326 IAC 3-5.

(1) The CEMS shall measure NO_X emissions rates in pounds per hour and/or pounds per million British thermal units.

(2) The CEMS shall be in operation at all times when the auxiliary boiler (AUX1) is in operation.

(c) Pursuant to 326 IAC 3-5-4, if revisions are made to the continuous monitoring standard operating procedures (SOP), the Permittee shall submit updates to the department biennially.

(d) 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 40 CFR 60.

D.3.10 CEMS Missing Data Substitution [326 IAC 2-2] [326 IAC 2-1.1-5]

In order to demonstrate compliance with Condition D.3.2, whenever the NO_X CEMS is malfunctioning or is down for maintenance or repairs, until a NO_X CEMS is brought back online, the Permittee shall calculate the hourly NO_X emission rate using the following fuel usage equation, which includes the NO_X emission rate limit required in 40 CFR 60, Subpart Db and a maximum fuel heat content of 1,030 million British thermal units per million cubic foot of natural gas:

NO_X emissions (lbs/hr) = natural gas usage (MMCF/hr) * 0.1 (lbs/mmBtu) * 1,030 (mmBtu/MMCF)

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

D.3.11 Record Keeping Requirements

(a) To document the compliance status with Condition D.3.2, the Permittee shall maintain records of the monthly NO_X emissions from the auxiliary boiler (AUX1).

(b) Records for the CEMS shall be maintained in accordance with 326 IAC 3-5-6.

(c) To document the compliance status with Condition D.3.10, the Permittee shall maintain records of the natural gas usage for AUX1, in MMCF, for each hour until a NO_X CEMS is back online.

(d) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.3.12 Reporting Requirement

(a) A quarterly summary of the information to document compliance with Condition D.3.2 shall be submitted using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported.

(b) The notifications and reports submitted by the Permittee require certification by a "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(d) A coal storage and handling system for Boiler 12, completed before May 1974.

(1) One (1) railcar unloading station with particulate emissions controlled by wet suppression and partial enclosure, with a maximum throughput of 1500 tons of coal per hour.

(2) An enclosed conveyor system to the coal storage pile(s), with the transfer points underground or enclosed by buildings. A telescoping chute is used to drop coal to the storage pile(s).

(3) Coal storage pile(s) and coal pile reclaim, with fugitive dust emissions controlled by compaction and wet suppression.

(4) Coal conveyors and the coal junction house, with carryover wet suppression, additional wet suppression and/or foam application, and enclosed transfer points.

(5) One coal conveyor, constructed in 1974 and reconstructed in 2009, identified as C08, with a maximum capacity of 1000 tons per hour, using carryover wet suppression.

Under 40 CFR 60, Subpart Y, coal conveyor C08 is an affected facility.

(6) Coal crusher house, with a baghouse, identified as CHDC, for PM control, with carryover wet suppression for PM control and enclosed transfer points within an enclosure for ancillary dust control.

(7) Coal sample house/breaker building with a baghouse, identified as SHDC, for PM control, with carryover wet suppression for PM control and enclosed transfer points within an enclosure for ancillary dust control.

(8) Coal tripper floor to coal bunkers, with a baghouse, identified as TFDC, for PM control, with enclosure for ancillary dust control.

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

Conveyors as follows: Underground conveyors. [326 IAC 6-3]

Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6-3]

Coal pile wind erosion. [326 IAC 6-4]

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

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

D.4.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), allowable particulate emissions for the coal handling operations shall be calculated as follows:

Emission Unit	Process Weight Rate (tons/hr)	Particulate Emissions Limit (lb/hr)
DP1	1500	83.0
DP2	1500	83.0
DP3	1500	83.0
DP4	1500	83.0
DP5	1500	83.0
DP6	1000	77.6
DP7	1000	77.6
DP8	1000	77.6
DP9	1000	77.6
DP10	1800	85.4
DP11	1000	77.6
DP12	1000	77.6
DP13	1000	77.6
DP14	1000	77.6
DP15	1000	77.6
CHDC Primary	400	66.3
CHDC Secondary	1000	77.6
Fly Ash 1	9.3	18.3
Fly Ash 2	200	58.5

(b) 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:

$E = 4.10\ P^{0.67}$

where: E = rate of emission in pounds per hour and
P = process weight rate in tons per hour.

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

$E = 55.0\ P^{0.11} - 40$

where: E = rate of emission in pounds per hour and
P = process weight rate in tons per hour.

(c) Pursuant to 326 IAC 6-3-2, for the coal processing at a throughput rate greater than 200 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.

SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS

Emission Unit Description:

(e) Dry fly ash handling, installed in 1997, including the following:

(1) Vacuum conveyance of fly ash to a storage silo with particulate emissions controlled by a bin vent filter, with a design throughput rate of 9.3 tons per hour.

(2) One (1) enclosed fly ash silo unloading station with a design unloading capacity of 200+ tons per hour, used to load dry fly ash to covered trucks, with particulate emissions controlled by the use of a telescoping chute with a vacuum system and a bin vent filter. Overhead doors with an interlock system are closed when ash trucks are being loaded.

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

Vents from ash transport systems not operated at positive pressure. [326 IAC 6-3]

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

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

D.5.1 Particulate [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the fly ash conveying system shall not exceed 18.3 pounds per hour when operating at a process weight rate of 9.3 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:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour.

(b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the fly ash silo unloading station shall not exceed 58.5 pounds per hour when operating at a process weight rate of 200 tons per hour. The pounds per hour limitation was calculated using the following equation:

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

$$E = 55.0 P^{0.11} - 40$$

where: E = rate of emission in pounds per hour and
P = process weight rate in tons per hour.

(c) Pursuant to 326 IAC 6-3-2(e)(3) (Particulate Emission Limitations for Manufacturing Processes), for the ash unloading at a throughput rate greater than 200 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.

Compliance Determination Requirements

D.5.2 Particulate Control [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule or in this permit, the bin vent filter for particulate control shall be in operation and control emissions at all times that fly ash is being transferred to the associated storage silo, the telescoping chute with a vacuum system and bin vent filter shall be in operation and control emissions at all times that ash is being unloaded from the silo, and the overhead doors shall be closed at all times that ash is being unloaded from the silo.

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

D.5.3 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

(a) Visible emission notations of the ash silo unloading station openings, or notations that the ash silo bay doors are completely closed, shall be performed at least once per day during normal daylight operations when ash is being unloaded. A trained employee shall record either of the following:

(1) whether all silo bay doors are completely closed during ash unloading, or

(2) whether emissions are normal or abnormal.

(b) Visible emission notations of the ash silo bin vent filter exhaust shall be performed at least once per day during normal daylight operations when transferring ash to or from the silo. A trained employee shall record whether emissions are normal or abnormal.

(c) Visible emission notations of the nozzle of the telescoping chute shall be performed at least once per day during normal daylight operations when transferring ash from the silo. A trained employee shall record whether emissions are normal or abnormal.

(d) If incomplete closure of a silo bay door is 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.

(e) If abnormal emissions are observed from an ash silo unloading station opening, at the bin vent filter exhaust or from the nozzle of the telescoping chute, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Observation of abnormal emissions that do not violate 326 IAC 6-4 (Fugitive Dust Emissions) or an applicable opacity limit 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.

(f) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, at least eighty percent (80%) of the time the process is in operation.

(g) 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.

(h) 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.

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

D.5.4 Record Keeping Requirements

(a) To document the compliance status with Condition D.5.3, the Permittee shall maintain records of the notations of the ash silo bay doors closure or the visible emission notations of the ash silo unloading station doorways, and the visible emission notations of the bin vent filter exhaust and the telescoping chute nozzle. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.6 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(f) Wet process bottom ash handling installed in approximately 1950, with bottom ash sluiced to storage pond(s), with water cover or vegetation sufficient to prevent ash re-entrainment. Ash removed from the pond(s) is stored in piles before being taken offsite by truck.

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

Ponded bottom ash handling and removal. [326 IAC 6-3]

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

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

D.6.1 Reserved

D.6.2 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

(a) Any ash storage pond at the source that contains bottom ash shall be observed once per week to determine if sufficient water is present in the pond to cover or saturate ash deposited in the pond. During any period when there is not sufficient water in the pond to cover or saturate ash present in the pond, visible emission notations of the ash storage pond area(s) shall be performed at least once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) If visible emissions are observed crossing the property line or boundaries of the property, right-of-way, or easement on which the source is located, 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.

(c) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, at least eighty percent (80%) of the time the process is in operation.

(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.

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

D.6.3 Record Keeping Requirements

(a) To document the compliance status with Condition D.6.2, the Permittee shall maintain a record of pond observations and any records of visible emission notations of the ash storage pond area(s). The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the precess did not operate that day).

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.7 EMISSIONS UNIT OPERATION CONDITIONS

Emission Unit Description:

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

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

(1) One (1) 480,000 BTU boiler in the "A" Building, installed in 1970 [326 IAC 6-2];
(2) One (1) 480,000 BTU boiler in the Gate House, installed in 1964, [326 IAC 6-2];
(3) One (1) 297,000 BTU boiler, installed in 1953 in the Relay House (Substation Bldg. #G15), each used for building heat. [326 IAC 6-2]

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

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

D.7.1 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: Emission limitations for facilities specified in 326 IAC 6-2-1(c)), the PM emissions from the "A" Building boiler, the Gate House boiler, and the Relay House boiler shall not exceed 0.27 pound per million Btu heat input (lb/MMBtu). This limitation was calculated using 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 = 0.8, for Q greater than 1,000 MMBtu/hr heat input.
h = Stack height in feet.

Pursuant to 326 IAC 6-2-3(b), the emission limitations for those indirect heating facilities which were existing and in operation on or before June 8, 1972, shall be calculated using the above equation where Q, N, and h include the parameters for all facilities in operation on June 8, 1972.

SECTION D.8 EMISSIONS UNIT OPERATION CONDITIONS

Emission Unit Description:

Specifically Regulated 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.

Cleaners and solvents characterized as follows:

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

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

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

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

D.8.1 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.8.2 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 ($38^{O}C$) (one hundred degrees Fahrenheit ($100^{O}F$));

(B) The solvent is agitated; or

(C) The solvent is heated.

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

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

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

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

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

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

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

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

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

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

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

SECTION D.9 EMISSIONS UNIT OPERATION CONDITIONS

Emission Unit Description:

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

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 emissions unit description box is descriptive information and does not constitute enforceable conditions.)

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

D.9.1 Particulate [326 IAC 6-3-2]

(a) 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 control methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

(b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the brazing, cutting, soldering, welding, 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:

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

Compliance Determination Requirement

D.9.2 Particulate Control [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule or in this permit, the fabric filters for particulate control shall be in operation and control emissions from the grinding and machining operations and from the sandblasting at all times that the associated process is in operation.

SECTION E ACID RAIN PROGRAM CONDITIONS

Emission Unit Description:

(a) One (1) cyclone coal-fired boiler, identified as Boiler 12, with a design heat input capacity of 4650 million Btu per hour (MMBtu/hr), with construction completed in May 1974, with an electrostatic precipitator (ESP) with a flue gas conditioning (FGC) system for control of particulate matter, exhausting to Stack 4. Natural gas can be fired during startup, shutdown, and malfunctions. Boiler 12 has a selective catalytic reduction (SCR) system for NO_X control, and has continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system.

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

Acid Rain Program

E.1 Acid Rain Permit [326 IAC 2-7-5(1)(C)] [326 IAC 21] [40 CFR 72 through 40 CFR 78]

Pursuant to 326 IAC 21 (Acid Deposition Control), the Permittee shall comply with all provisions of the Acid Rain permit issued for this source, and any other applicable requirements contained in 40 CFR 72 through 40 CFR 78. The Acid Rain permit for this source is attached to this permit as Appendix B, and is incorporated by reference.

E.2 Title IV Emissions Allowances [326 IAC 2-7-5(4)] [326 IAC 21]

Emissions exceeding any allowances that the Permittee lawfully holds under the Title IV Acid Rain Program of the Clean Air Act are prohibited, subject to the following limitations:

(a) No revision of this permit shall be required for increases in emissions that are authorized by allowances acquired under the Title IV Acid Rain Program, provided that such increases do not require a permit revision under any other applicable requirement.

(b) No limit shall be placed on the number of allowances held by the Permittee. The Permittee may not use allowances as a defense to noncompliance with any other applicable requirement.

(c) Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Clean Air Act.

SECTION F EMISSIONS UNIT OPERATION CONDITIONS

Emission Unit Description:

Entire Source

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

Provisions of NIPSCO Consent Decree Applicable to Michigan City Generating Station

F.1 Consent Decree [*United States and the State of Indiana v. Northern Indiana Public Service Co.*, 2:11-cv-00016-JVB-APR (N.D. Ind. July 22, 2011), paragraph 169] [326 IAC 2-7-6(3)]

This source is subject to certain conditions, requirements and limitations set forth in the consent decree entered into by and among the United States, the State of Indiana, and the Permittee in *United States and the State of Indiana v. Northern Indiana Public Service Co.*, 2:11-cv-00016-JVB-APR (N.D. Ind. July 22, 2011) (herein referred to as the "Decree"). Pursuant to paragraph 169 of the Decree, those paragraphs and tables of the Decree listed in Attachment A of this permit are incorporated by reference into this permit and are applicable requirements under this permit. Subject to the terms and conditions of this Section F.1, the Permittee shall comply with the paragraphs and tables of the Decree that are listed in Attachment C of this permit. A copy of the Decree is attached to this permit as Attachment D. However, only those specific paragraphs and tables of the Decree that are included in Attachment A of this permit and incorporated by reference pursuant to this Section F.1, are applicable requirements enforceable through this permit.

Each paragraph and table listed in Attachment A of this permit is incorporated by reference in its entirety, including any and all paragraphs, conditions, requirements and/or limitations of the Decree explicitly referenced in such paragraphs or tables. However, the Permittee's obligations under this permit to comply with the conditions, requirements and limitations incorporated by reference in the paragraphs and tables listed in Attachment A of this permit shall be limited to those conditions, requirements and limitations applicable to, and only to the extent applicable to, the Michigan City Generating Station while this permit is in effect. For clarity, such applicable conditions, requirements and limitations shall, subject to the next paragraph, include the annual system tonnage limitations applicable to the NIPSCO System (as that term is defined under paragraph 36 of the Decree) as a whole as provided under Table 4 and Table 6 of the Decree as listed in Attachment A hereto.

In accordance with paragraph 169 of the Decree, any noncompliance with an annual system tonnage limitation incorporated by reference pursuant to this Section F.1 and Attachment A shall constitute a single violation for the NIPSCO System (as that term is defined under paragraph 36 of the Decree) as a whole and does not create a separate violation or violations for each unit or source within the NIPSCO System. Compliance with the paragraphs and tables listed in Attachment A of this permit shall be determined exclusively by reference to the conditions, requirements and limitations of the Decree. Whenever any conflict or inconsistency arises between the Decree and this permit, the terms and conditions of the Decree control.

SECTION G Clean Air Interstate Rule (CAIR) Nitrogen Oxides Annual, Sulfur Dioxide, and Nitrogen Oxides Ozone Season Trading Programs – CAIR Permit for CAIR Units Under 326 IAC 24-1-1(a), 326 IAC 24-2-1(a), and 326 IAC 24-3-1(a)

ORIS Code: 997

CAIR Permit for CAIR Units Under 326 IAC 24-1-1(a), 326 IAC 24-2-1(a), and 326 IAC 24-3-1(a)

(a) Three (3) natural gas-fired boilers, identified as Boiler 4, Boiler 5, and Boiler 6, each with a design heat input capacity of 482 million Btu per hour (MMBtu/hr), exhausting to Stack 1, Stack 2, and Stack 3, respectively, each with a continuous emissions monitoring system (CEMS) for nitrogen oxides (NO_X). Installation of Boilers 4 and 5 was completed in 1950 and installation of Boiler 6 was completed in 1951.

(b) One (1) cyclone coal-fired boiler, identified as Boiler 12, with a design heat input capacity of 4650 million Btu per hour (MMBtu/hr), with construction completed in May 1974, with an electrostatic precipitator (ESP) with a flue gas conditioning (FGC) system for control of particulate matter, exhausting to Stack 4. Natural gas can be fired during startup, shutdown, and malfunctions. Boiler 12 has a selective catalytic reduction (SCR) system for NO_X control, and has continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system.

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

G.1 Automatic Incorporation of Definitions [326 IAC 24-1-7(e)] [326 IAC 24-2-7(e)] [326 IAC 24-3-7(e)] [40 CFR 97.123(b)] [40 CFR 97.223(b)] [40 CFR 97.323(b)]

This CAIR permit is deemed to incorporate automatically the definitions of terms under 326 IAC 24-1-2, 326 IAC 24-2-2, and 326 IAC 24-3-2.

G.2 Standard Permit Requirements [326 IAC 24-1-4(a)] [326 IAC 24-2-4(a)] [326 IAC 24-3-4(a)] [40 CFR 97.106(a)] [40 CFR 97.206(a)] [40 CFR 97.306(a)]

(a) The owners and operators of each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source and CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit shall operate each source and unit in compliance with this CAIR permit.

(b) The CAIR NO_X units, CAIR SO_2 units, and CAIR NO_X ozone season units subject to this CAIR permit are Boiler 4, Boiler 5, Boiler 6, and Boiler 12.

G.3 Monitoring, Reporting, and Record Keeping Requirements [326 IAC 24-1-4(b)] [326 IAC 24-2-4(b)] [326 IAC 24-3-4(b)] [40 CFR 97.106(b)] [40 CFR 97.206(b)] [40 CFR 97.306(b)]

(a) The owners and operators, and the CAIR designated representative, of each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source and CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit at the source shall comply with the applicable monitoring, reporting, and record keeping requirements of 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11.

(b) The emissions measurements recorded and reported in accordance with 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11 shall be used to determine compliance by each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source with the CAIR NO_X emissions limitation under 326 IAC 24-1-4(c), CAIR SO_2 emissions limitation under 326 IAC 24-2-4(c), and CAIR NO_X ozone season emissions limitation under 326 IAC 24-3-4(c) and Condition G.4.1, Nitrogen Oxides Emission Requirements, Condition G.4.2, Sulfur Dioxide Emission Requirements, and Condition G.4.3, Nitrogen Oxides Ozone Season Emission Requirements.

G.4.1 Nitrogen Oxides Emission Requirements [326 IAC 24-1-4(c)] [40 CFR 97.106(c)]

(a) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_X source and each CAIR NO_X unit at the source shall hold, in the source's compliance account, CAIR NO_X allowances available for compliance deductions for the control period under 326 IAC 24-1-9(i) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_X units at the source, as determined in accordance with 326 IAC 24-1-11.

(b) A CAIR NO_X unit shall be subject to the requirements under 326 IAC 24-1-4(c)(1) for the control period starting on the applicable date, as determined under 326 IAC 24-1-4(c)(2), and for each control period thereafter.

(c) A CAIR NO_X allowance shall not be deducted for compliance with the requirements under 326 IAC 24-1-4(c)(1), for a control period in a calendar year before the year for which the CAIR NO_X allowance was allocated.

(d) CAIR NO_X allowances shall be held in, deducted from, or transferred into or among CAIR NO_X allowance tracking system accounts in accordance with 326 IAC 24-1-9, 326 IAC 24-1-10, and 326 IAC 24-1-12.

(e) A CAIR NO_X allowance is a limited authorization to emit one (1) ton of nitrogen oxides in accordance with the CAIR NO_X annual trading program. No provision of the CAIR NO_X annual trading program, the CAIR permit application, the CAIR permit, or an exemption under 326 IAC 24-1-3 and no provision of law shall be construed to limit the authority of the State of Indiana or the United States to terminate or limit the authorization.

(f) A CAIR NO_X allowance does not constitute a property right.

(g) Upon recordation by the U.S. EPA under 326 IAC 24-1-8, 326 IAC 24-1-9, 326 IAC 24-1-10, or 326 IAC 24-1-12, every allocation, transfer, or deduction of a CAIR NO_X allowance to or from a CAIR NO_X source's compliance account is incorporated automatically in this CAIR permit.

G.4.2 Sulfur Dioxide Emission Requirements [326 IAC 24-2-4(c)] [40 CFR 97.206(c)]

(a) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO_2 source and each CAIR SO_2 unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO_2 allowances available for compliance deductions for the control period under 326 IAC 24-2-8(j) and 326 IAC 24-2-8(k) not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO_2 units at the source, as determined in accordance with 326 IAC 24-2-10.

(b) A CAIR SO_2 unit shall be subject to the requirements under 326 IAC 24-2-4(c)(1) for the control period starting on the applicable date, as determined under 326 IAC 24-2-4(c)(2), and for each control period thereafter.

(c) A CAIR SO_2 allowance shall not be deducted for compliance with the requirements under 326 IAC 24-2-4(c)(1), for a control period in a calendar year before the year for which the CAIR SO_2 allowance was allocated.

(d) CAIR SO_2 allowances shall be held in, deducted from, or transferred into or among CAIR SO_2 allowance tracking system accounts in accordance with 326 IAC 24-2-8, 326 IAC 24-2-9, and 326 IAC 24-2-11.

(e) A CAIR SO_2 allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO_2 trading program. No provision of the CAIR SO_2 trading program, the CAIR permit application, the CAIR permit, or an exemption under 326 IAC 24-2-3 and no provision of law shall be construed to limit the authority of the State of Indiana or the United States to terminate or limit the authorization.

(f) A CAIR SO_2 allowance does not constitute a property right.

(g) Upon recordation by the U.S. EPA under 326 IAC 24-2-8, 326 IAC 24-2-9, or 326 IAC 24-2-11, every allocation, transfer, or deduction of a CAIR SO_2 allowance to or from a CAIR SO_2 source's compliance account is incorporated automatically in this CAIR permit.

G.4.3 Nitrogen Oxides Ozone Season Emission Requirements [326 IAC 24-3-4(c)] [40 CFR 97.306(c)]

(a) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_X ozone season source and each CAIR NO_X ozone season unit at the source shall hold, in the source's compliance account, CAIR NO_X ozone season allowances available for compliance deductions for the control period under 326 IAC 24-3-9(i) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_X ozone season units at the source, as determined in accordance with 326 IAC 24-3-11.

(b) A CAIR NO_X ozone season unit shall be subject to the requirements under 326 IAC 24-3-4(c)(1) for the control period starting on the applicable date, as determined under 326 IAC 24-3-4(c)(2), and for each control period thereafter.

(c) A CAIR NO_X ozone season allowance shall not be deducted for compliance with the requirements under 326 IAC 24-3-4(c)(1), for a control period in a calendar year before the year for which the CAIR NO_X ozone season allowance was allocated.

(d) CAIR NO_X ozone season allowances shall be held in, deducted from, or transferred into or among CAIR NO_X ozone season allowance tracking system accounts in accordance with 326 IAC 24-3-9, 326 IAC 24-3-10, and 326 IAC 24-3-12.

(e) A CAIR NO_X ozone season allowance is a limited authorization to emit one (1) ton of nitrogen oxides in accordance with the CAIR NO_X ozone season trading program. No provision of the CAIR NO_X ozone season trading program, the CAIR permit application, the CAIR permit, or an exemption under 326 IAC 24-3-3 and no provision of law shall be construed to limit the authority of the State of Indiana or the United States to terminate or limit the authorization.

(f) A CAIR NO_X ozone season allowance does not constitute a property right.

(g) Upon recordation by the U.S. EPA under 326 IAC 24-3-8, 326 IAC 24-3-9, 326 IAC 24-3-10, or 326 IAC 24-3-12, every allocation, transfer, or deduction of a CAIR NO_X ozone season allowance to or from a CAIR NO_X ozone season source's compliance account is incorporated automatically in this CAIR permit.

G.5 Excess Emissions Requirements [326 IAC 24-1-4(d)] [326 IAC 24-2-4(d)] [326 IAC 24-3-4(d)] [40 CFR 97.106(d)] [40 CFR 97.206(d)] [40 CFR 97.306(d)]

(a) The owners and operators of a CAIR NO_X source and each CAIR NO_X unit that emits nitrogen oxides during any control period in excess of the CAIR NO_X emissions limitation shall do the following:

(1) Surrender the CAIR NO_X allowances required for deduction under 326 IAC 24-1-9(j)(4).

(2) Pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, the Clean Air Act (CAA) or applicable state law.

Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 326 IAC 24-1-4, the Clean Air Act (CAA), and applicable state law.

(b) The owners and operators of a CAIR SO_2 source and each CAIR SO_2 unit that emits sulfur dioxide during any control period in excess of the CAIR SO_2 emissions limitation shall do the following:

(1) Surrender the CAIR SO_2 allowances required for deduction under 326 IAC 24-2-8(k)(4).

(2) Pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, the Clean Air Act (CAA) or applicable state law.

Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 326 IAC 24-2-4, the Clean Air Act (CAA), and applicable state law.

(c) The owners and operators of a CAIR NO_X ozone season source and each CAIR NO_X ozone season unit that emits nitrogen oxides during any control period in excess of the CAIR NO_X ozone season emissions limitation shall do the following:

(1) Surrender the CAIR NO_X ozone season allowances required for deduction under 326 IAC 24-3-9(j)(4).

(2) Pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, the Clean Air Act (CAA) or applicable state law.

Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 326 IAC 24-3-4, the Clean Air Act (CAA), and applicable state law.

G.6 Record Keeping Requirements [326 IAC 24-1-4(e)] [326 IAC 24-2-4(e)] [326 IAC 24-3-4(e)] [326 IAC 2-7-5(3)] [40 CFR 97.106(e)] [40 CFR 97.206(e)] [40 CFR 97.306(e)]

Unless otherwise provided, the owners and operators of the CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit at the source shall keep on site at the source or at a central location within Indiana for those owners or operators with unattended sources, each of the following documents for a period of five (5) years from the date the document was created:

(a) The certificate of representation under 326 IAC 24-1-6(h), 326 IAC 24-2-6(h), and 326 IAC 24-3-6(h) for the CAIR designated representative for the source and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation. The certificate and documents shall be retained on site at the source or at a central location within Indiana for those owners or operators with unattended sources beyond such five (5) year period until such documents are superseded because of the submission of a new account certificate of representation under 326 IAC 24-1-6(h), 326 IAC 24-2-6(h), and 326 IAC 24-3-6(h) changing the CAIR designated representative.

(b) All emissions monitoring information, in accordance with 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11, provided that to the extent that 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11 provides for a three (3) year period for record keeping, the three (3) year period shall apply.

(c) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR NO_X ozone season trading program.

(d) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR NO_X ozone season trading program or to demonstrate compliance with the requirements of the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR NO_X ozone season trading program.

This period may be extended for cause, at any time before the end of five (5) years, in writing by IDEM, OAQ or the U.S. EPA. Unless otherwise provided, all records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

G.7 Reporting Requirements [326 IAC 24-1-4(e)] [326 IAC 24-2-4(e)] [326 IAC 24-3-4(e)] [40 CFR 97.106(e)] [40 CFR 97.206(e)] [40 CFR 97.306(e)]

(a) The CAIR designated representative of the CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit at the source shall submit the reports required under the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR NO_X ozone season trading program, including those under 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11.

(b) Pursuant to 326 IAC 24-1-4(e), 326 IAC 24-2-4(e), and 326 IAC 24-3-4(e) and 326 IAC 24-1-6(e)(1), 326 IAC 24-2-6(e)(1), and 326 IAC 24-3-6(e)(1), each submission under the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR NO_X ozone season trading program shall include the following certification statement by the CAIR designated representative: “I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(c) Where 326 IAC 24-1, 326 IAC 24-2, and 326 IAC 24-3 requires a submission to IDEM, OAQ, the information shall be submitted to:

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

(d) Where 326 IAC 24-1, 326 IAC 24-2, and 326 IAC 24-3 requires a submission to U.S. EPA, the information shall be submitted to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue, NW
Mail Code 6204N
Washington, DC 20460

G.8 Liability [326 IAC 24-1-4(f)] [326 IAC 24-2-4(f)] [326 IAC 24-3-4(f)] [40 CFR 97.106(f)] [40 CFR 97.206(f)] [40 CFR 97.306(f)]

The owners and operators of each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit shall be liable as follows:

(a) Each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit shall meet the requirements of the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR NO_X ozone season trading program, respectively.

(b) Any provision of the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR NO_X ozone season trading program that applies to a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source or the CAIR designated representative of a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source shall also apply to the owners and operators of such source and of the CAIR NO_X units, CAIR SO_2 units, and CAIR NO_X ozone season units at the source.

(c) Any provision of the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR NO_X ozone season trading program that applies to a CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit or the CAIR designated representative of a CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit shall also apply to the owners and operators of such units.

G.9 Effect on Other Authorities [326 IAC 24-1-4(g)] [326 IAC 24-2-4(g)] [326 IAC 24-3-4(g)] [40 CFR 97.106(g)] [40 CFR 97.206(g)] [40 CFR 97.306(g)]

No provision of the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR NO_X ozone season trading program, a CAIR permit application, a CAIR permit, or an exemption under 326 IAC 24-1-3, 326 IAC 24-2-3, and 326 IAC 24-3-3 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source or CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act (CAA).

G.10 CAIR Designated Representative and Alternate CAIR Designated Representative [326 IAC 24-1-6] [326 IAC 24-2-6] [326 IAC 24-3-6] [40 CFR 97, Subpart BB] [40 CFR 97, Subpart BBB] [40 CFR 97, Subpart BBBB]

Pursuant to 326 IAC 24-1-6, 326 IAC 24-2-6, and 326 IAC 24-3-6:

(a) Except as specified in 326 IAC 24-1-6(f)(3), 326 IAC 24-2-6(f)(3), and 326 IAC 24-3-6(f)(3), each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source, including all CAIR NO_X units, CAIR SO_2 units, and CAIR NO_X ozone season units at the source, shall have one (1) and only one (1) CAIR designated representative, with regard to all matters under the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR NO_X ozone season trading program concerning the source or any CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit at the source.

(b) The provisions of 326 IAC 24-1-6(f), 326 IAC 24-2-6(f), and 326 IAC 24-3-6(f) shall apply where the owners or operators of a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source choose to designate an alternate CAIR designated representative.

Except as specified in 326 IAC 24-1-6(f)(3), 326 IAC 24-2-6(f)(3), and 326 IAC 24-3-6(f)(3), whenever the term "CAIR designated representative" is used, the term shall be construed to include the CAIR designated representative or any alternate CAIR designated representative.

SECTION H.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)]: (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

(c) One (1) natural gas-fired auxiliary boiler, identified as AUX1, rated at 109 million Btu per hour (MMBtu/hr), installed in 2003, equipped with low NO_X burners, exhausting to Stack AUX1, with a continuous emissions monitoring system (CEMS) for nitrogen oxides (NO_X).

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

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

H.1.1 General Provisions Relating to New Source Performance Standards (NSPS) [40 CFR 60, Subpart A] [326 IAC 12]

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

H.1.2 Industrial-Commercial-Institutional Steam Generating Units NSPS Requirements [40 CFR 60, Subpart Db] [326 IAC 12]

Pursuant to 40 CFR 60 Subpart Db, the Permittee shall comply with the provisions of 40 CFR 60 Subpart Db, which are incorporated as 326 IAC 12-1 for auxiliary boiler AUX 1, as specified as follows:

(1) 40 CFR 60.40b(a) & (j)
(2) 40 CFR 60.41b
(3) 40 CFR 60.42b
(4) 40 CFR 60.44b(a)(1), (h) & (i)
(5) 40 CFR 60.45b
(6) 40 CFR 60.46b
(7) 40 CFR 60.48b
(8) 40 CFR 60.49b

SECTION H.2 STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

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

(5) One coal conveyor, constructed in 1974 and reconstructed in 2009, identified as C08, with a maximum capacity of 1000 tons per hour, using carryover wet suppression.

Under 40 CFR 60, Subpart Y, coal conveyor C08 is an affected facility.

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

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

H.2.1 General Provisions Relating to New Source Performance Standards (NSPS) [40 CFR 60, Subpart A] [326 IAC 12]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1, apply to coal conveyor C08 except as otherwise specified in 40 CFR 60, Subpart Y.

H.2.2 New Source Performance Standards (NSPS) for Coal Preparation Plants [40 CFR Part 60, Subpart Y] [326 IAC 12]

Pursuant to 40 CFR 60 Subpart Y, the Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Y, which are incorporated by reference as 326 IAC 12, as specified as follows:

(1) 40 CFR 60.250(a)&(c)
(2) 40 CFR 60.251
(3) 40 CFR 60.254(b)(1)&(2)
(4) 40 CFR 60.255(b)(1)&(2)
(5) 40 CFR 60.257
(6) 40 CFR 60.258(a)(1) through (3), (d)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name:	Northern Indiana Public Service Company - Michigan City Generating Station
Source Address:	101 Wabash Street, Michigan City, Indiana 46360
Part 70 Permit No.:	T 091-29806-00021

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)

☐ Report (specify)

☐ Notification (specify)

☐ Affidavit (specify)

☐ Other (specify)

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Northern Indiana Public Service Company - Michigan City Generating Station
Source Address: 101 Wabash Street, Michigan City, Indiana 46360
Part 70 Permit No.: T 091-29806-00021

This form consists of 2 pages **Page 1 of 2**

☐ This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) 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: ____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report: Auxiliary Boiler NOX Emissions

Source Name:	Northern Indiana Public Service Company (NIPSCO) Michigan City Generating Station
Source Address:	101 North Wabash Street, Michigan City, Indiana 46360
Part 70 Permit No.:	T 091-29806-00021
Facilities:	Auxiliary Boiler AUX1
Parameter:	Minor PSD Limit (NO_X Emissions)
Limit:	Less than 40 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

MONTHS: ________________ **to** ________________ **YEAR:** ______________

Month	Column 1	Column 2	Column 1 + Column 2
	NO_X Emissions (tons) This Month	NO_X Emissions (tons) Previous 11 Months	Total NO_X Emissions (tons) 12 Month Period
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 AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Northern Indiana Public Service Company - Michigan City Generating Station
Source Address: 101 Wabash Street, Michigan City, Indiana 46360
Part 70 Permit No.: T 091-29806-00021

Months: ________ to __________ Year: ___________

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C-General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".
☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.
☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

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

Form Completed by:______________________________

Title / Position: _________________________________

Date:____

Phone: ____

Attachment A – New Source Performance Standards: Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units [40 CFR 60 Subpart Db] [326 IAC 12]

Source Description and Location

Source Name: Northern Indiana Public Service Company - Michigan City Generating Station
Source Location: 101 Wabash Street, Michigan City, IN 46360
County: LaPorte

NSPS [40 CFR Part 60, Subpart Db]

Subpart Db—Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units

Source: 72 FR 32742, June 13, 2007, unless otherwise noted.

§ 60.40b Applicability and delegation of authority.

(a) The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)).

(b) Any affected facility meeting the applicability requirements under paragraph (a) of this section and commencing construction, modification, or reconstruction after June 19, 1984, but on or before June 19, 1986, is subject to the following standards:

(1) Coal-fired affected facilities having a heat input capacity between 29 and 73 MW (100 and 250 MMBtu/hr), inclusive, are subject to the particulate matter (PM) and nitrogen oxides (NO_X) standards under this subpart.

(2) Coal-fired affected facilities having a heat input capacity greater than 73 MW (250 MMBtu/hr) and meeting the applicability requirements under subpart D (Standards of performance for fossil-fuel-fired steam generators; §60.40) are subject to the PM and NO_Xstandards under this subpart and to the sulfur dioxide (SO_2) standards under subpart D (§60.43).

(3) Oil-fired affected facilities having a heat input capacity between 29 and 73 MW (100 and 250 MMBtu/hr), inclusive, are subject to the NO_Xstandards under this subpart.

(4) Oil-fired affected facilities having a heat input capacity greater than 73 MW (250 MMBtu/hr) and meeting the applicability requirements under subpart D (Standards of performance for fossil-fuel-fired steam generators; §60.40) are also subject to the NO_Xstandards under this subpart and the PM and SO_2standards under subpart D (§60.42 and §60.43).

(c) Affected facilities that also meet the applicability requirements under subpart J (Standards of performance for petroleum refineries; §60.104) are subject to the PM and NO_Xstandards under this subpart and the SO_2standards under subpart J (§60.104).

(d) Affected facilities that also meet the applicability requirements under subpart E (Standards of performance for incinerators; §60.50) are subject to the $NO_X$and PM standards under this subpart.

(e) Steam generating units meeting the applicability requirements under subpart Da (Standards of performance for electric utility steam generating units; §60.40Da) are not subject to this subpart.

(f) Any change to an existing steam generating unit for the sole purpose of combusting gases containing total reduced sulfur (TRS) as defined under §60.281 is not considered a modification under §60.14 and the steam generating unit is not subject to this subpart.

(g) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, the following authorities shall be retained by the Administrator and not transferred to a State.

(1) Section 60.44b(f).

(2) Section 60.44b(g).

(3) Section 60.49b(a)(4).

(h) Any affected facility that meets the applicability requirements and is subject to subpart Ea, subpart Eb, or subpart AAAA of this part is not covered by this subpart.

(i) Heat recovery steam generators that are associated with combined cycle gas turbines and that meet the applicability requirements of subpart KKKK of this part are not subject to this subpart. This subpart will continue to apply to all other heat recovery steam generators that are capable of combusting more than 29 MW (100 MMBtu/hr) heat input of fossil fuel. If the heat recovery steam generator is subject to this subpart, only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The gas turbine emissions are subject to subpart GG or KKKK, as applicable, of this part.)

(j) Any affected facility meeting the applicability requirements under paragraph (a) of this section and commencing construction, modification, or reconstruction after June 19, 1986 is not subject to subpart D (Standards of Performance for Fossil-Fuel-Fired Steam Generators, §60.40).

(k) Any affected facility that meets the applicability requirements and is subject to an EPA approved State or Federal section 111(d)/129 plan implementing subpart Cb or subpart BBBB of this part is not covered by this subpart.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5084, Jan. 28, 2009]

§ 60.41b Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from the fuels listed in §60.42b(a), §60.43b(a), or §60.44b(a), as applicable, during a calendar year and the potential heat input to the steam generating unit had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility in a calendar year.

Byproduct/waste means any liquid or gaseous substance produced at chemical manufacturing plants, petroleum refineries, or pulp and paper mills (except natural gas, distillate oil, or residual oil) and combusted in a steam generating unit for heat recovery or for disposal. Gaseous substances with carbon dioxide (CO_2) levels greater than 50 percent or carbon monoxide levels greater than 10 percent are not byproduct/waste for the purpose of this subpart.

Chemical manufacturing plants mean industrial plants that are classified by the Department of Commerce under Standard Industrial Classification (SIC) Code 28.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels, including but not limited to solvent refined coal, gasified coal not meeting the definition of natural gas, coal-oil mixtures, coke oven gas, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

Coal refuse means any byproduct 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 kJ/kg (6,000 Btu/lb) on a dry basis.

Cogeneration , also known as combined heat and power, means a facility that simultaneously produces both electric (or mechanical) and useful thermal energy from the same primary energy source.

Coke oven gas means the volatile constituents generated in the gaseous exhaust during the carbonization of bituminous coal to form coke.

Combined cycle system means a system in which a separate source, such as a gas turbine, internal combustion engine, kiln, etc., provides exhaust gas to a steam generating unit.

Conventional technology means wet flue gas desulfurization (FGD) technology, dry FGD technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

Distillate oil means fuel oils that contain 0.05 weight percent nitrogen or less and comply with the specifications for fuel oil numbers 1 and 2, as defined by the American Society of Testing and Materials in ASTM D396 (incorporated by reference, see §60.17) or diesel fuel oil numbers 1 and 2, as defined by the American Society for Testing and Materials in ASTM D975 (incorporated by reference, see §60.17).

Dry flue gas desulfurization technology means a SO_2control system that is located downstream of the steam generating unit and removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline reagent and water, whether introduced separately or as a premixed slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline slurries or solutions used in dry flue gas desulfurization technology include but are not limited to lime and sodium.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source, such as a stationary gas turbine, internal combustion engine, kiln, etc., to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Emerging technology means any SO_2control system that is not defined as a conventional technology under this section, and for which the owner or operator of the facility has applied to the Administrator and received approval to operate as an emerging technology under §60.49b(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State Implementation Plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 51.24.

Fluidized bed combustion technology means combustion of fuel in a bed or series of beds (including but not limited to bubbling bed units and circulating bed units) of limestone aggregate (or other sorbent materials) in which these materials are forced upward by the flow of combustion air and the gaseous products of combustion.

Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Full capacity means operation of the steam generating unit at 90 percent or more of the maximum steady-state design heat input capacity.

Gaseous fuel means any fuel that is a gas at ISO conditions. This includes, but is not limited to, natural gas and gasified coal (including coke oven gas).

Gross output means the gross useful work performed by the steam generated. For units generating only electricity, the gross useful work performed is the gross electrical output from the turbine/generator set. For cogeneration units, the gross useful work performed is the gross electrical or mechanical output plus 75 percent of the useful thermal output measured relative to ISO conditions that is not used to generate additional electrical or mechanical output or to enhance the performance of the unit (*i.e.* , steam delivered to an industrial process).

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

Heat release rate means the steam generating unit design heat input capacity (in MW or Btu/hr) divided by the furnace volume (in cubic meters or cubic feet); the furnace volume is that volume bounded by the front furnace wall where the burner is located, the furnace side waterwall, and extending to the level just below or in front of the first row of convection pass tubes.

Heat transfer medium means any material that is used to transfer heat from one point to another point.

High heat release rate means a heat release rate greater than 730,000 J/sec-m^3 (70,000 Btu/hr-ft^3).

ISO Conditions means a temperature of 288 Kelvin, a relative humidity of 60 percent, and a pressure of 101.3 kilopascals.

Lignite means a type of coal classified as lignite A or lignite B by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17).

Low heat release rate means a heat release rate of 730,000 J/sec-m^3 (70,000 Btu/hr-ft^3) or less.

Mass-feed stoker steam generating unit means a steam generating unit where solid fuel is introduced directly into a retort or is fed directly onto a grate where it is combusted.

Maximum heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel on a steady state basis, as determined by the physical design and characteristics of the steam generating unit.

Municipal-type solid waste means refuse, more than 50 percent of which is waste consisting of a mixture of paper, wood, yard wastes, food wastes, plastics, leather, rubber, and other combustible materials, and noncombustible materials such as glass and rock.

Natural gas means:

(1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or

(2) Liquefied petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see §60.17); or

(3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 megajoules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum or a liquid fuel derived from crude oil or petroleum, including distillate and residual oil.

Petroleum refinery means industrial plants as classified by the Department of Commerce under Standard Industrial Classification (SIC) Code 29.

Potential sulfur dioxide emission rate means the theoretical SO_2emissions (nanograms per joule (ng/J) or lb/MMBtu heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems. For gasified coal or oil that is desulfurized prior to combustion, the *Potential sulfur dioxide emission rate* is the theoretical SO_2emissions (ng/J or lb/MMBtu heat input) that would result from combusting fuel in a cleaned state without using any post combustion emission control systems.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Pulp and paper mills means industrial plants that are classified by the Department of Commerce under North American Industry Classification System (NAICS) Code 322 or Standard Industrial Classification (SIC) Code 26.

Pulverized coal-fired steam generating unit means a steam generating unit in which pulverized coal is introduced into an air stream that carries the coal to the combustion chamber of the steam generating unit where it is fired in suspension. This includes both conventional pulverized coal-fired and micropulverized coal-fired steam generating units. Residual oil means crude oil, fuel oil numbers 1 and 2 that have a nitrogen content greater than 0.05 weight percent, and all fuel oil numbers 4, 5 and 6, as defined by the American Society of Testing and Materials in ASTM D396 (incorporated by reference, see §60.17).

Spreader stoker steam generating unit means a steam generating unit in which solid fuel is introduced to the combustion zone by a mechanism that throws the fuel onto a grate from above. Combustion takes place both in suspension and on the grate.

Steam generating unit means a device that combusts any fuel or byproduct/waste and produces steam or heats water or heats any heat transfer medium. This term includes any municipal-type solid waste incinerator with a heat recovery steam generating unit or any steam generating unit that combusts fuel and is part of a cogeneration system or a combined cycle system. This term does not include process heaters as they are defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Very low sulfur oil means for units constructed, reconstructed, or modified on or before February 28, 2005, oil that contains no more than 0.5 weight percent sulfur or that, when combusted without SO_2emission control, has a SO_2emission rate equal to or less than 215 ng/J (0.5 lb/MMBtu) heat input. For units constructed, reconstructed, or modified after February 28, 2005 and not located in a noncontinental area, *very low sulfur oil* means oil that contains no more than 0.30 weight percent sulfur or that, when combusted without SO_2emission control, has a SO_2emission rate equal to or less than 140 ng/J (0.32 lb/MMBtu) heat input. For units constructed, reconstructed, or modified after February 28, 2005 and located in a noncontinental area, *very low sulfur oil* means oil that contains no more than 0.5 weight percent sulfur or that, when combusted without SO_2emission control, has a SO_2emission rate equal to or less than 215 ng/J (0.50 lb/MMBtu) heat input.

Wet flue gas desulfurization technology means a SO_2control system that is located downstream of the steam generating unit and removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gas with an alkaline slurry or solution and forming a liquid material. This definition applies to devices where the aqueous liquid material product of this contact is subsequently converted to other forms. Alkaline reagents used in wet flue gas desulfurization technology include, but are not limited to, lime, limestone, and sodium.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of PM or SO_2.

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including, but not limited to, sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5084, Jan. 28, 2009]

§ 60.42b Standard for sulfur dioxide (SO_2).

Link to an amendment published at 76 FR 3523, Jan. 20, 2011.

(a) Except as provided in paragraphs (b), (c), (d), or (j) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal or oil shall cause to be discharged into the atmosphere any gases that contain SO_2in excess of 87 ng/J (0.20 lb/MMBtu) or 10 percent (0.10) of the potential SO_2emission rate (90 percent reduction) and the emission limit determined according to the following formula:

$$E_s = \frac{(K_a H_a + K_b H_b)}{(H_a + H_b)}$$

Where:

E_s= SO_2emission limit, in ng/J or lb/MMBtu heat input;

K_a= 520 ng/J (or 1.2 lb/MMBtu);

K_b= 340 ng/J (or 0.80 lb/MMBtu);

H_a= Heat input from the combustion of coal, in J (MMBtu); and

H_b= Heat input from the combustion of oil, in J (MMBtu).

For facilities complying with the percent reduction standard, only the heat input supplied to the affected facility from the combustion of coal and oil is counted in this paragraph. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels or heat derived from exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

(b) On and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal refuse alone in a fluidized bed combustion steam generating unit shall cause to be discharged into the atmosphere any gases that contain SO_2in excess of 87 ng/J (0.20 lb/MMBtu) or 20 percent (0.20) of the potential SO_2emission rate (80 percent reduction) and 520 ng/J (1.2 lb/MMBtu) heat input. If coal or oil is fired with coal refuse, the affected facility is subject to paragraph (a) or (d) of this section, as applicable. For facilities complying with the percent reduction standard, only the heat input supplied to the affected facility from the combustion of coal and oil is counted in this paragraph. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels or heat derived from exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

(c) On and after the date on which the performance test is completed or is required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that combusts coal or oil, either alone or in combination with any other fuel, and that uses an emerging technology for the control of SO_2emissions, shall cause to be discharged into the atmosphere any gases that contain SO_2in excess of 50 percent of the potential SO_2emission rate (50 percent reduction) and that contain SO_2in excess of the emission limit determined according to the following formula:

$$E_s = \frac{(K_c H_c + K_d H_d)}{(H_c + H_d)}$$

Where:

E_s= SO2 emission limit, in ng/J or lb/MM Btu heat input;

K_c= 260 ng/J (or 0.60 lb/MMBtu);

K_d= 170 ng/J (or 0.40 lb/MMBtu);

H_c= Heat input from the combustion of coal, in J (MMBtu); and

H_d= Heat input from the combustion of oil, in J (MMBtu).

For facilities complying with the percent reduction standard, only the heat input supplied to the affected facility from the combustion of coal and oil is counted in this paragraph. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels, or from the heat input derived from exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

(d) On and after the date on which the performance test is completed or required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005 and listed in paragraphs (d)(1), (2), (3), or (4) of this section shall cause to be discharged into the atmosphere any gases that contain SO_2in excess of 520 ng/J (1.2 lb/MMBtu) heat input if the affected facility combusts coal, or 215 ng/J (0.5 lb/MMBtu) heat input if the affected facility combusts oil other than very low sulfur oil. Percent reduction requirements are not applicable to affected facilities under paragraphs (d)(1), (2), (3) or (4) of this section. For facilities complying with paragraphs (d)(1), (2), or (3) of this section, only the heat input supplied to the affected facility from the combustion of coal and oil is counted in this paragraph. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels or heat derived from exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

(1) Affected facilities that have an annual capacity factor for coal and oil of 30 percent (0.30) or less and are subject to a federally enforceable permit limiting the operation of the affected facility to an annual capacity factor for coal and oil of 30 percent (0.30) or less;

(2) Affected facilities located in a noncontinental area; or

(3) Affected facilities combusting coal or oil, alone or in combination with any fuel, in a duct burner as part of a combined cycle system where 30 percent (0.30) or less of the heat entering the steam generating unit is from combustion of coal and oil in the duct burner and 70 percent (0.70) or more of the heat entering the steam generating unit is from the exhaust gases entering the duct burner; or

(4) The affected facility burns coke oven gas alone or in combination with natural gas or very low sulfur distillate oil.

(e) Except as provided in paragraph (f) of this section, compliance with the emission limits, fuel oil sulfur limits, and/or percent reduction requirements under this section are determined on a 30-day rolling average basis.

(f) Except as provided in paragraph (j)(2) of this section, compliance with the emission limits or fuel oil sulfur limits under this section is determined on a 24-hour average basis for affected facilities that (1) have a federally enforceable permit limiting the annual capacity factor for oil to 10 percent or less, (2) combust only very low sulfur oil, and (3) do not combust any other fuel.

(g) Except as provided in paragraph (i) of this section and §60.45b(a), the SO_2emission limits and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.

(h) Reductions in the potential SO_2emission rate through fuel pretreatment are not credited toward the percent reduction requirement under paragraph (c) of this section unless:

(1) Fuel pretreatment results in a 50 percent or greater reduction in potential SO_2emissions and

(2) Emissions from the pretreated fuel (without combustion or post-combustion SO_2control) are equal to or less than the emission limits specified in paragraph (c) of this section.

(i) An affected facility subject to paragraph (a), (b), or (c) of this section may combust very low sulfur oil or natural gas when the SO_2control system is not being operated because of malfunction or maintenance of the SO_2control system.

(j) Percent reduction requirements are not applicable to affected facilities combusting only very low sulfur oil. The owner or operator of an affected facility combusting very low sulfur oil shall demonstrate that the oil meets the definition of very low sulfur oil by: (1) Following the performance testing procedures as described in §60.45b(c) or §60.45b(d), and following the monitoring procedures as described in §60.47b(a) or §60.47b(b) to determine SO_2emission rate or fuel oil sulfur content; or (2) maintaining fuel records as described in §60.49b(r).

(k)(1) Except as provided in paragraphs (k)(2), (k)(3), and (k)(4) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, natural gas, a mixture of these fuels, or a mixture of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that contain SO_2in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 8 percent (0.08) of the potential SO_2emission rate (92 percent reduction) and 520 ng/J (1.2 lb/MMBtu) heat input. For facilities complying with the percent reduction standard and paragraph (k)(3) of this section, only the heat input supplied to the affected facility from the combustion of coal and oil is counted in paragraph (k) of this section. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels or heat derived from exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

(2) Units firing only very low sulfur oil, gaseous fuel, a mixture of these fuels, or a mixture of these fuels with any other fuels with a potential SO_2emission rate of 140 ng/J (0.32 lb/MMBtu) heat input or less are exempt from the SO_2emissions limit in paragraph (k)(1) of this section.

(3) Units that are located in a noncontinental area and that combust coal, oil, or natural gas shall not discharge any gases that contain SO_2in excess of 520 ng/J (1.2 lb/MMBtu) heat input if the affected facility combusts coal, or 215 ng/J (0.50 lb/MMBtu) heat input if the affected facility combusts oil or natural gas.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5084, Jan. 28, 2009]

§ 60.43b Standard for particulate matter (PM).

(a) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005 that combusts coal or combusts mixtures of coal with other fuels, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:

(1) 22 ng/J (0.051 lb/MMBtu) heat input, (i) If the affected facility combusts only coal, or

(ii) 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.

(2) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility combusts coal and other fuels and has an annual capacity factor for the other fuels greater than 10 percent (0.10) and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor greater than 10 percent (0.10) for fuels other than coal.

(3) 86 ng/J (0.20 lb/MMBtu) heat input if the affected facility combusts coal or coal and other fuels and

(i) Has an annual capacity factor for coal or coal and other fuels of 30 percent (0.30) or less,

(ii) Has a maximum heat input capacity of 73 MW (250 MMBtu/hr) or less,

(iii) Has a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor of 30 percent (0.30) or less for coal or coal and other solid fuels, and

(iv) Construction of the affected facility commenced after June 19, 1984, and before November 25, 1986.

(4) An affected facility burning coke oven gas alone or in combination with other fuels not subject to a PM standard under §60.43b and not using a post-combustion technology (except a wet scrubber) for reducing PM or SO_2emissions is not subject to the PM limits under §60.43b(a).

(b) On and after the date on which the performance test is completed or required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, and that combusts oil (or mixtures of oil with other fuels) and uses a conventional or emerging technology to reduce SO_2emissions shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input.

(c) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, and that combusts wood, or wood with other fuels, except coal, shall cause to be discharged from that affected facility any gases that contain PM in excess of the following emission limits:

(1) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility has an annual capacity factor greater than 30 percent (0.30) for wood.

(2) 86 ng/J (0.20 lb/MMBtu) heat input if (i) The affected facility has an annual capacity factor of 30 percent (0.30) or less for wood;

(ii) Is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor of 30 percent (0.30) or less for wood; and

(iii) Has a maximum heat input capacity of 73 MW (250 MMBtu/hr) or less.

(d) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts municipal-type solid waste or mixtures of municipal-type solid waste with other fuels, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:

(1) 43 ng/J (0.10 lb/MMBtu) heat input;

(i) If the affected facility combusts only municipal-type solid waste; or

(ii) If the affected facility combusts municipal-type solid waste and other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.

(2) 86 ng/J (0.20 lb/MMBtu) heat input if the affected facility combusts municipal-type solid waste or municipal-type solid waste and other fuels; and

(i) Has an annual capacity factor for municipal-type solid waste and other fuels of 30 percent (0.30) or less;

(ii) Has a maximum heat input capacity of 73 MW (250 MMBtu/hr) or less;

(iii) Has a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor of 30 percent (0.30) or less for municipal-type solid waste, or municipal-type solid waste and other fuels; and

(iv) Construction of the affected facility commenced after June 19, 1984, but on or before November 25, 1986.

(e) 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 heat input capacity.

(f) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that can combust 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. Owners and operators of an affected facility that elect to install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for measuring PM emissions according to the requirements of this subpart and are subject to a federally enforceable PM limit of 0.030 lb/MMBtu or less are exempt from the opacity standard specified in this paragraph.

(g) The PM and opacity standards apply at all times, except during periods of startup, shutdown, or malfunction.

(h)(1) Except as provided in paragraphs (h)(2), (h)(3), (h)(4), (h)(5), and (h)(6) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 13 ng/J (0.030 lb/MMBtu) heat input,

(2) As an alternative to meeting the requirements of paragraph (h)(1) of this section, the owner or operator of an affected facility for which modification commenced after February 28, 2005, may elect to meet the requirements of this paragraph. On and after the date on which the initial performance test is completed or required to be completed under §60.8, no owner or operator of an affected facility that commences modification after February 28, 2005 shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of both:

(i) 22 ng/J (0.051 lb/MMBtu) heat input derived from the combustion of coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels; and

(ii) 0.2 percent of the combustion concentration (99.8 percent reduction) when combusting coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels.

(3) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a maximum heat input capacity of 73 MW (250 MMBtu/h) or less shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input.

(4) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a maximum heat input capacity greater than 73 MW (250 MMBtu/h) shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 37 ng/J (0.085 lb/MMBtu) heat input.

(5) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, an owner or operator of an affected facility not located in a noncontinental area that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.30 weight percent sulfur, coke oven gas, a mixture of these fuels, or either fuel (or a mixture of these fuels) in combination with other fuels not subject to a PM standard in §60.43b and not using a post-combustion technology (except a wet scrubber) to reduce SO_2or PM emissions is not subject to the PM limits in (h)(1) of this section.

(6) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, an owner or operator of an affected facility located in a noncontinental area that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.5 weight percent sulfur, coke oven gas, a mixture of these fuels, or either fuel (or a mixture of these fuels) in combination with other fuels not subject to a PM standard in §60.43b and not using a post-combustion technology (except a wet scrubber) to reduce SO_2or PM emissions is not subject to the PM limits in (h)(1) of this section.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5084, Jan. 28, 2009]

§ 60.44b Standard for nitrogen oxides (NOX).

(a) Except as provided under paragraphs (k) and (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that 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 NO_X(expressed as NO_2) in excess of the following emission limits:

Fuel/steam generating unit type	Nitrogen oxide emission limits (expressed as NO_2) heat input	
	ng/J	lb/MMBTu
(1) Natural gas and distillate oil, except (4):		
(i) Low heat release rate	43	0.10
(ii) High heat release rate	86	0.20
(2) Residual oil:		
(i) Low heat release rate	130	0.30
(ii) High heat release rate	170	0.40
(3) Coal:		
(i) Mass-feed stoker	210	0.50
(ii) Spreader stoker and fluidized bed combustion	260	0.60
(iii) Pulverized coal	300	0.70
(iv) Lignite, except (v)	260	0.60
(v) Lignite mined in North Dakota, South Dakota, or Montana and combusted in a slag tap furnace	340	0.80
(vi) Coal-derived synthetic fuels	210	0.50
(4) Duct burner used in a combined cycle system:		
(i) Natural gas and distillate oil	86	0.20

(ii) Residual oil	170	0.40

(b) Except as provided under paragraphs (k) and (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that 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 NO_Xin excess of a limit determined by the use of the following formula:

$$E_n = \frac{(EL_{go}H_{go}) + (EL_{ro}H_{ro}) + (EL_cH_c)}{(H_{go} + H_{ro} + H_c)}$$

Where:

E_n= NO_Xemission limit (expressed as NO_2), ng/J (lb/MMBtu);

EL_{go}= Appropriate emission limit from paragraph (a)(1) for combustion of natural gas or distillate oil, ng/J (lb/MMBtu);

H_{go}= Heat input from combustion of natural gas or distillate oil, J (MMBtu);

EL_{ro}= Appropriate emission limit from paragraph (a)(2) for combustion of residual oil, ng/J (lb/MMBtu);

H_{ro}= Heat input from combustion of residual oil, J (MMBtu);

EL_c= Appropriate emission limit from paragraph (a)(3) for combustion of coal, ng/J (lb/MMBtu); and

H_c= Heat input from combustion of coal, J (MMBtu).

(c) Except as provided under paragraph (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts coal or oil, or a mixture of these fuels with natural gas, and wood, municipal-type solid waste, or any other fuel shall cause to be discharged into the atmosphere any gases that contain NO_Xin excess of the emission limit for the coal or oil, or mixtures of these fuels with natural gas combusted in the affected facility, as determined pursuant to paragraph (a) or (b) of this section, unless the affected facility has an annual capacity factor for coal or oil, or mixture of these fuels with natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the affected facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, or a mixture of these fuels with natural gas.

(d) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts natural gas with wood, municipal-type solid waste, or other solid fuel, except coal, shall cause to be discharged into the atmosphere from that affected facility any gases that contain NO_Xin excess of 130 ng/J (0.30 lb/MMBtu) heat input unless the affected facility has an annual capacity factor for natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the affected facility to an annual capacity factor of 10 percent (0.10) or less for natural gas.

(e) Except as provided under paragraph (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts coal, oil, or natural gas with byproduct/waste shall cause to be discharged into the atmosphere any gases that contain NO_Xin excess of the emission limit determined by the following formula unless the affected facility has an annual capacity factor for coal, oil, and natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the affected facility to an annual capacity factor of 10 percent (0.10) or less:

$$E_n = \frac{(EL_{go}H_{go}) + (EL_{ro}H_{ro}) + (EL_cH_c)}{(H_{go} + H_{ro} + H_c)}$$

Where:

E_n= NO_Xemission limit (expressed as NO_2), ng/J (lb/MMBtu);

EL_{go}= Appropriate emission limit from paragraph (a)(1) for combustion of natural gas or distillate oil, ng/J (lb/MMBtu);

H_{go}= Heat input from combustion of natural gas, distillate oil and gaseous byproduct/waste, J (MMBtu);

EL_{ro}= Appropriate emission limit from paragraph (a)(2) for combustion of residual oil and/or byproduct/waste, ng/J (lb/MMBtu);

H_{ro}= Heat input from combustion of residual oil, J (MMBtu);

EL_c= Appropriate emission limit from paragraph (a)(3) for combustion of coal, ng/J (lb/MMBtu); and

H_c= Heat input from combustion of coal, J (MMBtu).

(f) Any owner or operator of an affected facility that combusts byproduct/waste with either natural gas or oil may petition the Administrator within 180 days of the initial startup of the affected facility to establish a NO_Xemission limit that shall apply specifically to that affected facility when the byproduct/waste is combusted. The petition shall include sufficient and appropriate data, as determined by the Administrator, such as NO_Xemissions from the affected facility, waste composition (including nitrogen content), and combustion conditions to allow the Administrator to confirm that the affected facility is unable to comply with the emission limits in paragraph (e) of this section and to determine the appropriate emission limit for the affected facility.

(1) Any owner or operator of an affected facility petitioning for a facility-specific NO_Xemission limit under this section shall:

(i) Demonstrate compliance with the emission limits for natural gas and distillate oil in paragraph (a)(1) of this section or for residual oil in paragraph (a)(2) or (l)(1) of this section, as appropriate, by conducting a 30-day performance test as provided in §60.46b(e). During the performance test only natural gas, distillate oil, or residual oil shall be combusted in the affected facility; and

(ii) Demonstrate that the affected facility is unable to comply with the emission limits for natural gas and distillate oil in paragraph (a)(1) of this section or for residual oil in paragraph (a)(2) or (l)(1) of this section, as appropriate, when gaseous or liquid byproduct/waste is combusted in the affected facility under the same conditions and using the same technological system of emission reduction applied when demonstrating compliance under paragraph (f)(1)(i) of this section.

(2) The NO_Xemission limits for natural gas or distillate oil in paragraph (a)(1) of this section or for residual oil in paragraph (a)(2) or (l)(1) of this section, as appropriate, shall be applicable to the affected facility until and unless the petition is approved by the Administrator. If the petition is approved by the Administrator, a facility-specific NO_Xemission limit will be established at the NO_Xemission level achievable when the affected facility is combusting oil or natural gas and byproduct/waste in a manner that the Administrator determines to be consistent with minimizing NO_Xemissions. In lieu of amending this subpart, a letter will be sent to the facility describing the facility-specific NO_Xlimit. The facility shall use the compliance procedures detailed in the letter and make the letter available to the public. If the Administrator determines it is appropriate, the conditions and requirements of the letter can be reviewed and changed at any point.

(g) Any owner or operator of an affected facility that combusts hazardous waste (as defined by 40 CFR part 261 or 40 CFR part 761) with natural gas or oil may petition the Administrator within 180 days of the initial startup of the affected facility for a waiver from compliance with the NO_Xemission limit that applies specifically to that affected facility. The petition must include sufficient and appropriate data, as determined by the Administrator, on NO_Xemissions from the affected facility, waste destruction efficiencies, waste composition (including nitrogen content), the quantity of specific wastes to be combusted and combustion conditions to allow the Administrator to determine if the affected facility is able to comply with the NO_Xemission limits required by this section. The owner or operator of the affected facility shall demonstrate that when hazardous waste is combusted in the affected facility, thermal destruction efficiency requirements for hazardous waste specified in an applicable federally enforceable requirement preclude compliance with the NO_Xemission limits of this section. The NO_Xemission limits for natural gas or distillate oil in paragraph (a)(1) of this section or for residual oil in paragraph (a)(2) or (l)(1) of this section, as appropriate, are applicable to the affected facility until and unless the petition is approved by the Administrator. (See 40 CFR 761.70 for regulations applicable to the incineration of materials containing polychlorinated biphenyls (PCB's).) In lieu of amending this subpart, a letter will be sent to the facility describing the facility-specific NO_Xlimit. The facility shall use the compliance procedures detailed in the letter and make the letter available to the public. If the Administrator determines it is appropriate, the conditions and requirements of the letter can be reviewed and changed at any point.

(h) For purposes of paragraph (i) of this section, the NO_X standards under this section apply at all times including periods of startup, shutdown, or malfunction.

(i) Except as provided under paragraph (j) of this section, compliance with the emission limits under this section is determined on a 30-day rolling average basis.

(j) Compliance with the emission limits under this section is determined on a 24-hour average basis for the initial performance test and on a 3-hour average basis for subsequent performance tests for any affected facilities that:

(1) Combust, alone or in combination, only natural gas, distillate oil, or residual oil with a nitrogen content of 0.30 weight percent or less;

(2) Have a combined annual capacity factor of 10 percent or less for natural gas, distillate oil, and residual oil with a nitrogen content of 0.30 weight percent or less; and

(3) Are subject to a federally enforceable requirement limiting operation of the affected facility to the firing of natural gas, distillate oil, and/or residual oil with a nitrogen content of 0.30 weight percent or less and limiting operation of the affected facility to a combined annual capacity factor of 10 percent or less for natural gas, distillate oil, and residual oil with a nitrogen content of 0.30 weight percent or less.

(k) Affected facilities that meet the criteria described in paragraphs (j)(1), (2), and (3) of this section, and that have a heat input capacity of 73 MW (250 MMBtu/hr) or less, are not subject to the NO_X emission limits under this section.

(l) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction or reconstruction after July 9, 1997 shall cause to be discharged into the atmosphere from that affected facility any gases that contain NO_X (expressed as NO_2) in excess of the following limits:

(1) If the affected facility combusts coal, oil, natural gas, a mixture of these fuels, or a mixture of these fuels with any other fuels: A limit of 86 ng/J (0.20 lb/MMBtu) heat input unless the affected facility has an annual capacity factor for coal, oil, and natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, and natural gas; or

(2) If the affected facility has a low heat release rate and combusts natural gas or distillate oil in excess of 30 percent of the heat input on a 30-day rolling average from the combustion of all fuels, a limit determined by use of the following formula:

$$E_n = \frac{(0.10 \times H_{go}) + (0.20 \times H_r)}{(H_{go} + H_r)}$$

Where:

E_n = NO_X emission limit, (lb/MMBtu);

H_{go} = 30-day heat input from combustion of natural gas or distillate oil; and

H_r = 30-day heat input from combustion of any other fuel.

(3) After February 27, 2006, units where more than 10 percent of total annual output is electrical or mechanical may comply with an optional limit of 270 ng/J (2.1 lb/MWh) gross energy output, based on a 30-day rolling average. Units complying with this output-based limit must demonstrate compliance according to the procedures of §60.48Da(i) of subpart Da of this part, and must monitor emissions according to §60.49Da(c), (k), through (n) of subpart Da of this part.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5086, Jan. 28, 2009]

§ 60.45b Compliance and performance test methods and procedures for sulfur dioxide.

(a) The SO_2emission standards in §60.42b apply at all times. Facilities burning coke oven gas alone or in combination with any other gaseous fuels or distillate oil are allowed to exceed the limit 30 operating days per calendar year for SO_2control system maintenance.

(b) In conducting the performance tests required under §60.8, the owner or operator shall use the methods and procedures in appendix A (including fuel certification and sampling) of this part or the methods and procedures as specified in this section, except as provided in §60.8(b). Section 60.8(f) does not apply to this section. The 30-day notice required in §60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator.

(c) The owner or operator of an affected facility shall conduct performance tests to determine compliance with the percent of potential SO_2emission rate (% P_s) and the SO_2emission rate (E_s) pursuant to §60.42b following the procedures listed below, except as provided under paragraph (d) and (k) of this section.

(1) The initial performance test shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the SO_2standards shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility.

(2) If only coal, only oil, or a mixture of coal and oil is combusted, the following procedures are used:

(i) The procedures in Method 19 of appendix A–7 of this part are used to determine the hourly SO_2emission rate (E_{ho}) and the 30-day average emission rate (E_{ao}). The hourly averages used to compute the 30-day averages are obtained from the CEMS of §60.47b(a) or (b).

(ii) The percent of potential SO_2emission rate (%P_s) emitted to the atmosphere is computed using the following formula:

$$\%P_s = 100\left(1 - \frac{\%R_g}{100}\right)\left(1 - \frac{\%R_f}{100}\right)$$

Where:

%P_s= Potential SO_2emission rate, percent;

%R_g= SO_2removal efficiency of the control device as determined by Method 19 of appendix A of this part, in percent; and

%R_f= SO_2removal efficiency of fuel pretreatment as determined by Method 19 of appendix A of this part, in percent.

(3) If coal or oil is combusted with other fuels, the same procedures required in paragraph (c)(2) of this section are used, except as provided in the following:

(i) An adjusted hourly SO_2emission rate (E_{ho}^o) is used in Equation 19–19 of Method 19 of appendix A of this part to compute an adjusted 30-day average emission rate (E_{ao}^o). The Eho° is computed using the following formula:

$$E_{ho}^o = \frac{E_{ho} - E_w(1 - X_1)}{X_1}$$

Where:

E_{ho}^o = Adjusted hourly SO_2emission rate, ng/J (lb/MMBtu);

E_{ho}= Hourly SO_2emission rate, ng/J (lb/MMBtu);

E_w= SO_2concentration in fuels other than coal and oil combusted in the affected facility, as determined by the fuel sampling and analysis procedures in Method 19 of appendix A of this part, ng/J (lb/MMBtu). The value $E_w$for each fuel lot is used for each hourly average during the time that the lot is being combusted; and

X_k= Fraction of total heat input from fuel combustion derived from coal, oil, or coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(ii) To compute the percent of potential SO_2emission rate (%P_s), an adjusted %R_g(%R_g^o) is computed from the adjusted E_{ao}^o from paragraph (b)(3)(i) of this section and an adjusted average SO_2inlet rate (E_{ai}^o) using the following formula:

$$\%R_g^o = 100\left(1.0 - \frac{E_{ao}^o}{E_{ai}^o}\right)$$

To compute E_{ai}^o , an adjusted hourly SO_2inlet rate (E_{hi}^o) is used. The E_{hi}^o is computed using the following formula:

$$E_{hi}^o = \frac{E_{hi} - E_w(1 - X_k)}{X_k}$$

Where:

E_{hi}^o = Adjusted hourly SO_2inlet rate, ng/J (lb/MMBtu); and

E_{hi}= Hourly SO_2inlet rate, ng/J (lb/MMBtu).

(4) The owner or operator of an affected facility subject to paragraph (c)(3) of this section does not have to measure parameters $E_w$or $X_k$if the owner or operator elects to assume that X_k= 1.0. Owners or operators of affected facilities who assume X_k= 1.0 shall:

(i) Determine %$P_s$following the procedures in paragraph (c)(2) of this section; and

(ii) Sulfur dioxide emissions (E_s) are considered to be in compliance with SO_2emission limits under §60.42b.

(5) The owner or operator of an affected facility that qualifies under the provisions of §60.42b(d) does not have to measure parameters $E_w$or $X_k$in paragraph (c)(3) of this section if the owner or operator of the affected facility elects to measure SO_2emission rates of the coal or oil following the fuel sampling and analysis procedures in Method 19 of appendix A–7 of this part.

(d) Except as provided in paragraph (j) of this section, the owner or operator of an affected facility that combusts only very low sulfur oil, natural gas, or a mixture of these fuels, has an annual capacity factor for oil of 10 percent (0.10) or less, and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for oil of 10 percent (0.10) or less shall:

(1) Conduct the initial performance test over 24 consecutive steam generating unit operating hours at full load;

(2) Determine compliance with the standards after the initial performance test based on the arithmetic average of the hourly emissions data during each steam generating unit operating day if a CEMS is used, or based on a daily average if Method 6B of appendix A of this part or fuel sampling and analysis procedures under Method 19 of appendix A of this part are used.

(e) The owner or operator of an affected facility subject to §60.42b(d)(1) shall demonstrate the maximum design capacity of the steam generating unit by operating the facility at maximum capacity for 24 hours. This demonstration will be made during the initial performance test and a subsequent demonstration may be requested at any other time. If the 24-hour average firing rate for the affected facility is less than the maximum design capacity provided by the manufacturer of the affected facility, the 24-hour average firing rate shall be used to determine the capacity utilization rate for the affected facility, otherwise the maximum design capacity provided by the manufacturer is used.

(f) For the initial performance test required under §60.8, compliance with the SO_2emission limits and percent reduction requirements under §60.42b is based on the average emission rates and the average percent reduction for $SO_2$for the first 30 consecutive steam generating unit operating days, except as provided under paragraph (d) of this section. The initial performance test is the only test for which at least 30 days prior notice is required unless otherwise specified by the Administrator. The initial performance test is to be scheduled so that the first steam generating unit operating day of the 30 successive steam generating unit operating days is completed within 30 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility. The boiler load during the 30-day period does not have to be the maximum design load, but must be representative of future operating conditions and include at least one 24-hour period at full load.

(g) After the initial performance test required under §60.8, compliance with the SO_2emission limits and percent reduction requirements under §60.42b is based on the average emission rates and the average percent reduction for $SO_2$for 30 successive steam generating unit operating days, except as provided under paragraph (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 $SO_2$are calculated to show compliance with the standard.

(h) Except as provided under paragraph (i) of this section, the owner or operator of an affected facility shall use all valid SO_2emissions data in calculating $\%P_s$and E_{ho}under paragraph (c), of this section whether or not the minimum emissions data requirements under §60.46b are achieved. All valid emissions data, including valid SO_2emission data collected during periods of startup, shutdown and malfunction, shall be used in calculating $\%P_s$and E_{ho}pursuant to paragraph (c) of this section.

(i) During periods of malfunction or maintenance of the SO_2control systems when oil is combusted as provided under §60.42b(i), emission data are not used to calculate $\%P_s$or $E_s$under §60.42b(a), (b) or (c), however, the emissions data are used to determine compliance with the emission limit under §60.42b(i).

(j) The owner or operator of an affected facility that only combusts very low sulfur oil, natural gas, or a mixture of these fuels with any other fuels not subject to an SO_2standard is not subject to the compliance and performance testing requirements of this section if the owner or operator obtains fuel receipts as described in §60.49b(r).

(k) The owner or operator of an affected facility seeking to demonstrate compliance in §§60.42b(d)(4), 60.42b(j), 60.42b(k)(2), and 60.42b(k)(3) (when not burning coal) shall follow the applicable procedures in §60.49b(r).

[72 FR 32742, June 13, 2007, as amended at 74 FR 5086, Jan. 28, 2009]

§ 60.46b Compliance and performance test methods and procedures for particulate matter and nitrogen oxides.

Link to an amendment published at 76 FR 3523, Jan. 20, 2011.

(a) The PM emission standards and opacity limits under §60.43b apply at all times except during periods of startup, shutdown, or malfunction. The NO_Xemission standards under §60.44b apply at all times.

(b) Compliance with the PM emission standards under §60.43b shall be determined through performance testing as described in paragraph (d) of this section, except as provided in paragraph (i) of this section.

(c) Compliance with the NO_Xemission standards under §60.44b shall be determined through performance testing under paragraph (e) or (f), or under paragraphs (g) and (h) of this section, as applicable.

(d) To determine compliance with the PM emission limits and opacity limits under §60.43b, the owner or operator of an affected facility shall conduct an initial performance test as required under §60.8, and shall conduct subsequent performance tests as requested by the Administrator, using the following procedures and reference methods:

(1) Method 3A or 3B of appendix A–2 of this part is used for gas analysis when applying Method 5 of appendix A–3 of this part or Method 17 of appendix A–6 of this part.

(2) Method 5, 5B, or 17 of appendix A of this part shall be used to measure the concentration of PM as follows:

(i) Method 5 of appendix A of this part shall be used at affected facilities without wet flue gas desulfurization (FGD) systems; and

(ii) Method 17 of appendix A–6 of this part may be used at facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of sections 8.1 and 11.1 of Method 5B of appendix A–3 of this part may be used in Method 17 of appendix A–6 of this part only if it is used after a wet FGD system. Do not use Method 17 of appendix A–6 of this part after wet FGD systems if the effluent is saturated or laden with water droplets.

(iii) Method 5B of appendix A of this part is to be used only after wet FGD systems.

(3) Method 1 of appendix A of this part is used to select the sampling site and the number of traverse sampling points. The sampling time for each run is at least 120 minutes and the minimum sampling volume is 1.7 dscm (60 dscf) except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.

(4) For Method 5 of appendix A of this part, the temperature of the sample gas in the probe and filter holder is monitored and is maintained at 160±14 °C (320±25 °F).

(5) For determination of PM emissions, the oxygen (O_2) or CO_2sample is obtained simultaneously with each run of Method 5, 5B, or 17 of appendix A of this part by traversing the duct at the same sampling location.

(6) For each run using Method 5, 5B, or 17 of appendix A of this part, the emission rate expressed in ng/J heat input is determined using:

(i) The O_2or CO_2measurements and PM measurements obtained under this section;

(ii) The dry basis F factor; and

(iii) The dry basis emission rate calculation procedure contained in Method 19 of appendix A of this part.

(7) Method 9 of appendix A of this part is used for determining the opacity of stack emissions.

(e) To determine compliance with the emission limits for NO_Xrequired under §60.44b, the owner or operator of an affected facility shall conduct the performance test as required under §60.8 using the continuous system for monitoring NO_Xunder §60.48(b).

(1) For the initial compliance test, $NO_X$from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the NO_Xemission standards under §60.44b. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period.

(2) Following the date on which the initial performance test is completed or is required to be completed in §60.8, whichever date comes first, the owner or operator of an affected facility which combusts coal (except as specified under §60.46b(e)(4)) or which combusts residual oil having a nitrogen content greater than 0.30 weight percent shall determine compliance with the NO_Xemission standards in §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 for each steam generating unit operating day as the average of all of the hourly NO_Xemission data for the preceding 30 steam generating unit operating days.

(3) Following the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that has a heat input capacity greater than 73 MW (250 MMBtu/hr) and that combusts natural gas, distillate oil, or residual oil having a nitrogen content of 0.30 weight percent or less shall determine compliance with the NO_Xstandards under §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 NO_Xemission data for the preceding 30 steam generating unit operating days.

(4) Following the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that has a heat input capacity of 73 MW (250 MMBtu/hr) or less and that combusts natural gas, distillate oil, gasified coal, or residual oil having a nitrogen content of 0.30 weight percent or less shall upon request determine compliance with the NO_Xstandards in §60.44b through the use of a 30-day performance test. During periods when performance tests are not requested, NO_Xemissions data collected pursuant to §60.48b(g)(1) or §60.48b(g)(2) are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the NO_Xemission standards. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NO_Xemission data for the preceding 30 steam generating unit operating days.

(5) If the owner or operator of an affected facility that combusts residual oil does not sample and analyze the residual oil for nitrogen content, as specified in §60.49b(e), the requirements of §60.48b(g)(1) apply and the provisions of §60.48b(g)(2) are inapplicable.

(f) To determine compliance with the emissions limits for NO_Xrequired by §60.44b(a)(4) or §60.44b(l) for duct burners used in combined cycle systems, either of the procedures described in paragraph (f)(1) or (2) of this section may be used:

(1) The owner or operator of an affected facility shall conduct the performance test required under §60.8 as follows:

(i) The emissions rate (E) of NO_Xshall be computed using Equation 1 in this section:

$$E = E_{sg} + \left(\frac{H_g}{H_b}\right)\left(E_{sg} - E_g\right) \qquad \text{(Eq.1)}$$

Where:

E = Emissions rate of $NO_X$from the duct burner, ng/J (lb/MMBtu) heat input;

E_{sg}= Combined effluent emissions rate, in ng/J (lb/MMBtu) heat input using appropriate F factor as described in Method 19 of appendix A of this part;

H_g= Heat input rate to the combustion turbine, in J/hr (MMBtu/hr);

H_b= Heat input rate to the duct burner, in J/hr (MMBtu/hr); and

E_g= Emissions rate from the combustion turbine, in ng/J (lb/MMBtu) heat input calculated using appropriate F factor as described in Method 19 of appendix A of this part.

(ii) Method 7E of appendix A of this part shall be used to determine the NO_Xconcentrations. Method 3A or 3B of appendix A of this part shall be used to determine O_2concentration.

(iii) The owner or operator shall identify and demonstrate to the Administrator's satisfaction suitable methods to determine the average hourly heat input rate to the combustion turbine and the average hourly heat input rate to the affected duct burner.

(iv) Compliance with the emissions limits under §60.44b(a)(4) or §60.44b(l) is determined by the three-run average (nominal 1-hour runs) for the initial and subsequent performance tests; or

(2) The owner or operator of an affected facility may elect to determine compliance on a 30-day rolling average basis by using the CEMS specified under §60.48b for measuring $NO_X$and $O_2$and meet the requirements of §60.48b. The sampling site shall be located at the outlet from the steam generating unit. The NO_Xemissions rate at the outlet from the steam generating unit shall constitute the NO_Xemissions rate from the duct burner of the combined cycle system.

(g) The owner or operator of an affected facility described in §60.44b(j) or §60.44b(k) shall demonstrate the maximum heat input capacity of the steam generating unit by operating the facility at maximum capacity for 24 hours. The owner or operator of an affected facility shall determine the maximum heat input capacity using the heat loss method or the heat input method described in sections 5 and 7.3 of the ASME *Power Test Codes* 4.1 (incorporated by reference, see §60.17). This demonstration of maximum heat input capacity shall be made during the initial performance test for affected facilities that meet the criteria of §60.44b(j). It shall be made within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start-up of each facility, for affected facilities meeting the criteria of §60.44b(k). Subsequent demonstrations may be required by the Administrator at any other time. If this demonstration indicates that the maximum heat input capacity of the affected facility is less than that stated by the manufacturer of the affected facility, the maximum heat input capacity determined during this demonstration shall be used to determine the capacity utilization rate for the affected facility. Otherwise, the maximum heat input capacity provided by the manufacturer is used.

(h) The owner or operator of an affected facility described in §60.44b(j) that has a heat input capacity greater than 73 MW (250 MMBtu/hr) shall:

(1) Conduct an initial performance test as required under §60.8 over a minimum of 24 consecutive steam generating unit operating hours at maximum heat input capacity to demonstrate compliance with the NO_Xemission standards under §60.44b using Method 7, 7A, 7E of appendix A of this part, or other approved reference methods; and

(2) Conduct subsequent performance tests once per calendar year or every 400 hours of operation (whichever comes first) to demonstrate compliance with the NO_Xemission standards under §60.44b over a minimum of 3 consecutive steam generating unit operating hours at maximum heat input capacity using Method 7, 7A, 7E of appendix A of this part, or other approved reference methods.

(i) The owner or operator of an affected facility seeking to demonstrate compliance with the PM limit in paragraphs §60.43b(a)(4) or §60.43b(h)(5) shall follow the applicable procedures in §60.49b(r).

(j) In place of PM testing with Method 5 or 5B of appendix A–3 of this part, or Method 17 of appendix A–6 of this part, an owner or operator may elect to install, calibrate, maintain, and operate a CEMS for monitoring PM emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who elects to continuously monitor PM emissions instead of conducting performance testing using Method 5 or 5B of appendix A–3 of this part or Method 17 of appendix A–6 of this part shall comply with the requirements specified in paragraphs (j)(1) through (j)(14) of this section.

(1) Notify the Administrator one month before starting use of the system.

(2) Notify the Administrator one month before stopping use of the system.

(3) The monitor shall be installed, evaluated, and operated in accordance with §60.13 of subpart A of this part.

(4) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under §60.8 of subpart A of this part or within 180 days of notification to the Administrator of use of the CEMS if the owner or operator was previously determining compliance by Method 5, 5B, or 17 of appendix A of this part performance tests, whichever is later.

(5) The owner or operator of an affected facility shall conduct an initial performance test for PM emissions as required under §60.8 of subpart A of this part. Compliance with the PM emission limit shall be determined by using the CEMS specified in paragraph (j) of this section to measure PM and calculating a 24-hour block arithmetic average emission concentration using EPA Reference Method 19 of appendix A of this part, section 4.1.

(6) Compliance with the PM emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using CEMS outlet data.

(7) At a minimum, valid CEMS hourly averages shall be obtained as specified in paragraphs (j)(7)(i) of this section for 75 percent of the total operating hours per 30-day rolling average.

(i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.

(ii) [Reserved]

(8) The 1-hour arithmetic averages required under paragraph (j)(7) of this section shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under §60.13(e)(2) of subpart A of this part.

(9) All valid CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (j)(7) of this section are not met.

(10) The CEMS shall be operated according to Performance Specification 11 in appendix B of this part.

(11) During the correlation testing runs of the CEMS required by Performance Specification 11 in appendix B of this part, PM and O_2(or CO_2) data shall be collected concurrently (or within a 30-to 60-minute period) by both the continuous emission monitors and performance tests conducted using the following test methods.

(i) For PM, Method 5 or 5B of appendix A–3 of this part or Method 17 of appendix A–6 of this part shall be used; and

(ii) After July 1, 2010 or after Method 202 of appendix M of part 51 has been revised to minimize artifact measurement and notice of that change has been published in theFederal Register,whichever is later, for condensable PM emissions, Method 202 of appendix M of part 51 shall be used; and

(iii) For O_2(or CO_2), Method 3A or 3B of appendix A–2 of this part, as applicable shall be used.

(12) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 2 in appendix F of this part. Relative Response Audit's must be performed annually and Response Correlation Audits must be performed every 3 years.

(13) When PM emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Administrator or EPA Reference Method 19 of appendix A of this part to provide, as necessary, valid emissions data for a minimum of 75 percent of total operating hours per 30-day rolling average.

(14) After July 1, 2011, within 90 days after completing a correlation testing run, the owner or operator of an affected facility shall either successfully enter the test data into EPA's WebFIRE data base located at *http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main* or mail a copy to: United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; Mail Code: D243–01; RTP, NC 27711.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5086, Jan. 28, 2009]

§ 60.47b Emission monitoring for sulfur dioxide.

(a) Except as provided in paragraphs (b) and (f) of this section, the owner or operator of an affected facility subject to the SO_2standards in §60.42b shall install, calibrate, maintain, and operate CEMS for measuring SO_2concentrations and either O_2or CO_2concentrations and shall record the output of the systems. For units complying with the percent reduction standard, the $SO_2$and either O_2or CO_2concentrations shall both be monitored at the inlet and outlet of the SO_2control device. If the owner or operator has installed and certified $SO_2$and O_2or CO_2CEMS according to the requirements of §75.20(c)(1) of this chapter and appendix A to part 75 of this chapter, and is continuing to meet the ongoing quality assurance requirements of §75.21 of this chapter and appendix B to part 75 of this chapter, those CEMS may be used to meet the requirements of this section, provided that:

(1) When relative accuracy testing is conducted, SO_2concentration data and CO_2(or O_2) data are collected simultaneously; and

(2) In addition to meeting the applicable $SO_2$and CO_2(or O_2) relative accuracy specifications in Figure 2 of appendix B to part 75 of this chapter, the relative accuracy (RA) standard in section 13.2 of Performance Specification 2 in appendix B to this part is met when the RA is calculated on a lb/MMBtu basis; and

(3) The reporting requirements of §60.49b are met. $SO_2$and CO_2(or O_2) data used to meet the requirements of §60.49b shall not include substitute data values derived from the missing data procedures in subpart D of part 75 of this chapter, nor shall the SO_2data have been bias adjusted according to the procedures of part 75 of this chapter.

(b) As an alternative to operating CEMS as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO_2emissions and percent reduction by:

(1) 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 of appendix A of this part. Method 19 of appendix A of this part provides procedures for converting these measurements into the format to be used in calculating the average SO_2input rate, or

(2) Measuring SO_2according to Method 6B of appendix A of this part at the inlet or outlet to the SO_2control system. An initial stratification test is required to verify the adequacy of the Method 6B of appendix A of this part sampling location. The stratification test shall consist of three paired runs of a suitable $SO_2$and CO_2measurement train operated at the candidate location and a second similar train operated according to the procedures in section 3.2 and the applicable procedures in section 7 of Performance Specification 2. Method 6B of appendix A of this part, Method 6A of appendix A of this part, or a combination of Methods 6 and 3 or 3B of appendix A of this part or Methods 6C and 3A of appendix A of this part are suitable measurement techniques. If Method 6B of appendix A of this part is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B of appendix A of this part 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent.

(3) A daily SO_2emission rate, E_D, shall be determined using the procedure described in Method 6A of appendix A of this part, section 7.6.2 (Equation 6A–8) and stated in ng/J (lb/MMBtu) heat input.

(4) The mean 30-day emission rate is calculated using the daily measured values in ng/J (lb/MMBtu) for 30 successive steam generating unit operating days using equation 19–20 of Method 19 of appendix A of this part.

(c) 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 this section.

(d) The 1-hour average SO_2emission rates measured by the CEMS required by paragraph (a) of this section and required under §60.13(h) is expressed in ng/J or lb/MMBtu heat input and is used to calculate the average emission rates under §60.42(b). Each 1-hour average SO_2emission rate must be based on 30 or more minutes of steam generating unit operation. The hourly averages shall be calculated according to §60.13(h)(2). Hourly SO_2emission rates are not calculated if the affected facility is operated less than 30 minutes in a given clock hour and are not counted toward determination of a steam generating unit operating day.

(e) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the CEMS.

(1) Except as provided for in paragraph (e)(4) of this section, all CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 of appendix B of this part.

(2) Except as provided for in paragraph (e)(4) of this section, quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of appendix F of this part.

(3) For affected facilities combusting coal or oil, alone or in combination with other fuels, the span value of the SO_2CEMS at the inlet to the SO_2control device is 125 percent of the maximum estimated hourly potential SO_2emissions of the fuel combusted, and the span value of the CEMS at the outlet to the SO_2control device is 50 percent of the maximum estimated hourly potential SO_2emissions of the fuel combusted. Alternatively, SO_2span values determined according to section 2.1.1 in appendix A to part 75 of this chapter may be used.

(4) As an alternative to meeting the requirements of requirements of paragraphs (e)(1) and (e)(2) of this section, the owner or operator may elect to implement the following alternative data accuracy assessment procedures:

(i) For all required $CO_2$and O_2monitors and for $SO_2$and NO_Xmonitors with span values greater than or equal to 100 ppm, the daily calibration error test and calibration adjustment procedures described in sections 2.1.1 and 2.1.3 of appendix B to part 75 of this chapter may be followed instead of the CD assessment procedures in Procedure 1, section 4.1 of appendix F to this part.

(ii) For all required $CO_2$and O_2monitors and for $SO_2$and NO_Xmonitors with span values greater than 30 ppm, quarterly linearity checks may be performed in accordance with section 2.2.1 of appendix B to part 75 of this chapter, instead of performing the cylinder gas audits (CGAs) described in Procedure 1, section 5.1.2 of appendix F to this part. If this option is selected: The frequency of the linearity checks shall be as specified in section 2.2.1 of appendix B to part 75 of this chapter; the applicable linearity specifications in section 3.2 of appendix A to part 75 of this chapter shall be met; the data validation and out-of-control criteria in section 2.2.3 of appendix B to part 75 of this chapter shall be followed instead of the excessive audit inaccuracy and out-of-control criteria in Procedure 1, section 5.2 of appendix F to this part; and the grace period provisions in section 2.2.4 of appendix B to part 75 of this chapter shall apply. For the purposes of data validation under this subpart, the cylinder gas audits described in Procedure 1, section 5.1.2 of appendix F to this part shall be performed for $SO_2$and NO_Xspan values less than or equal to 30 ppm; and

(iii) For SO_2, CO_2, and O_2monitoring systems and for NO_Xemission rate monitoring systems, RATAs may be performed in accordance with section 2.3 of appendix B to part 75 of this chapter instead of following the procedures described in Procedure 1, section 5.1.1 of appendix F to this part. If this option is selected: The frequency of each RATA shall be as specified in section 2.3.1 of appendix B to part 75 of this chapter; the applicable relative accuracy specifications shown in Figure 2 in appendix B to part 75 of this chapter shall be met; the data validation and out-of-control criteria in section 2.3.2 of appendix B to part 75 of this chapter shall be followed instead of the excessive audit inaccuracy and out-of-control criteria in Procedure 1, section 5.2 of appendix F to this part; and the grace period provisions in section 2.3.3 of appendix B to part 75 of this chapter shall apply. For the purposes of data validation under this subpart, the relative accuracy specification in section 13.2 of Performance Specification 2 in appendix B to this part shall be met on a lb/MMBtu basis for SO_2(regardless of the SO_2emission level during the RATA), and for NO_X when the average NO_X emission rate measured by the reference method during the RATA is less than 0.100 lb/MMBtu.

(f) The owner or operator of an affected facility that combusts very low sulfur oil or is demonstrating compliance under §60.45b(k) is not subject to the emission monitoring requirements under paragraph (a) of this section if the owner or operator maintains fuel records as described in §60.49b(r).

[72 FR 32742, June 13, 2007, as amended at 74 FR 5087, Jan. 28, 2009]

§ 60.48b Emission monitoring for particulate matter and nitrogen oxides.

Link to an amendment published at 76 FR 3523, Jan. 20, 2011.

(a) Except as provided in paragraph (j) of this section, the owner or operator of an affected facility subject to the opacity standard under §60.43b shall install, calibrate, maintain, and operate a continuous opacity monitoring systems (COMS) for measuring the opacity of emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility subject to an opacity standard under §60.43b and meeting the conditions under paragraphs (j)(1), (2), (3), (4), or (5) of this section who elects not to install a COMS shall conduct a performance test using Method 9 of appendix A–4 of this part and the procedures in §60.11 to demonstrate compliance with the applicable limit in §60.43b and shall comply with either paragraphs (a)(1), (a)(2), or (a)(3) of this section. If during the initial 60 minutes of observation all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent, the observation period may be reduced from 3 hours to 60 minutes.

(1) Except as provided in paragraph (a)(2) and (a)(3) of this section, the owner or operator shall conduct subsequent Method 9 of appendix A–4 of this part performance tests using the procedures in paragraph (a) of this section according to the applicable schedule in paragraphs (a)(1)(i) through (a)(1)(iv) of this section, as determined by the most recent Method 9 of appendix A–4 of this part performance test results.

(i) If no visible emissions are observed, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted;

(ii) If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted;

(iii) If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 3 calendar months from the date that the most recent performance test was conducted; or

(iv) If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 of appendix A–4 of this part performance test must be completed within 30 calendar days from the date that the most recent performance test was conducted.

(2) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A–4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A–4 of this part performance tests, elect to perform subsequent monitoring using Method 22 of appendix A–7 of this part according to the procedures specified in paragraphs (a)(2)(i) and (ii) of this section.

(i) The owner or operator shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel for which an opacity standard is applicable using Method 22 of appendix A–7 of this part and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (*i.e.* , 30 seconds per 10 minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (*i.e.* , 90 seconds per 30 minute period) the owner or operator shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation (*i.e.* , 90 seconds) or conduct a new Method 9 of appendix A–4 of this part performance test using the procedures in paragraph (a) of this section within 30 calendar days according to the requirements in §60.46d(d)(7).

(ii) If no visible emissions are observed for 30 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed.

(3) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A–4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A–4 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Administrator. The observations shall be similar, but not necessarily identical, to the requirements in paragraph (a)(2) of this section. For reference purposes in preparing the monitoring plan, see OAQPS “Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems.” This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Policy Group (D243–02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods.

(b) Except as provided under paragraphs (g), (h), and (i) of this section, the owner or operator of an affected facility subject to a NO_X standard under §60.44b shall comply with either paragraphs (b)(1) or (b)(2) of this section.

(1) Install, calibrate, maintain, and operate CEMS for measuring NO_X and O_2 (or CO_2) emissions discharged to the atmosphere, and shall record the output of the system; or

(2) If the owner or operator has installed a NO_X emission rate CEMS to meet the requirements of part 75 of this chapter and is continuing to meet the ongoing requirements of part 75 of this chapter, that CEMS may be used to meet the requirements of this section, except that the owner or operator shall also meet the requirements of §60.49b. Data reported to meet the requirements of §60.49b shall not include data substituted using the missing data procedures in subpart D of part 75 of this chapter, nor shall the data have been bias adjusted according to the procedures of part 75 of this chapter.

(c) The CEMS required under paragraph (b) of this section shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

(d) The 1-hour average NO_X emission rates measured by the continuous NO_X monitor required by paragraph (b) of this section and required under §60.13(h) shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under §60.44b. The 1-hour averages shall be calculated using the data points required under §60.13(h)(2).

(e) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems.

(1) For affected facilities combusting coal, wood or municipal-type solid waste, the span value for a COMS shall be between 60 and 80 percent.

(2) For affected facilities combusting coal, oil, or natural gas, the span value for NO_X is determined using one of the following procedures:

(i) Except as provided under paragraph (e)(2)(ii) of this section, NO_X span values shall be determined as follows:

Fuel	**Span values for NO_X (ppm)**
Natural gas	500.
Oil	500.
Coal	1,000.
Mixtures	500 (x + y) + 1,000z.

Where:

x = Fraction of total heat input derived from natural gas;

y = Fraction of total heat input derived from oil; and

z = Fraction of total heat input derived from coal.

(ii) As an alternative to meeting the requirements of paragraph (e)(2)(i) of this section, the owner or operator of an affected facility may elect to use the NO_X span values determined according to section 2.1.2 in appendix A to part 75 of this chapter.

(3) All span values computed under paragraph (e)(2)(i) of this section for combusting mixtures of regulated fuels are rounded to the nearest 500 ppm. Span values computed under paragraph (e)(2)(ii) of this section shall be rounded off according to section 2.1.2 in appendix A to part 75 of this chapter.

(f) When NO_X emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7 of appendix A of this part, Method 7A of appendix A of this part, 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.

(g) The owner or operator of an affected facility that has a heat input capacity of 73 MW (250 MMBtu/hr) or less, and that has an annual capacity factor for residual oil having a nitrogen content of 0.30 weight percent or less, natural gas, distillate oil, gasified coal, or any mixture of these fuels, greater than 10 percent (0.10) shall:

(1) Comply with the provisions of paragraphs (b), (c), (d), (e)(2), (e)(3), and (f) of this section; or

(2) Monitor steam generating unit operating conditions and predict NO_X emission rates as specified in a plan submitted pursuant to §60.49b(c).

(h) The owner or operator of a duct burner, as described in §60.41b, that is subject to the NO_X standards in §60.44b(a)(4), §60.44b(e), or §60.44b(l) is not required to install or operate a continuous emissions monitoring system to measure NO_X emissions.

(i) The owner or operator of an affected facility described in §60.44b(j) or §60.44b(k) is not required to install or operate a CEMS for measuring NO_X emissions.

(j) The owner or operator of an affected facility that meets the conditions in either paragraph (j)(1), (2), (3), (4), (5), or (6) of this section is not required to install or operate a COMS if:

(1) The affected facility uses a PM CEMS to monitor PM emissions; or

(2) The affected facility burns only liquid (excluding residual oil) or gaseous fuels with potential SO_2 emissions rates of 26 ng/J (0.060 lb/MMBtu) or less and does not use a post-combustion technology to reduce SO_2 or PM emissions. The owner or operator must maintain fuel records of the sulfur content of the fuels burned, as described under §60.49b(r); or

(3) The affected facility burns coke oven gas alone or in combination with fuels meeting the criteria in paragraph (j)(2) of this section and does not use a post-combustion technology to reduce SO_2 or PM emissions; or

(4) The affected facility does not use post-combustion technology (except a wet scrubber) for reducing PM, SO_2, or carbon monoxide (CO) emissions, burns only gaseous fuels or fuel oils that contain less than or equal to 0.30 weight percent sulfur, and is operated such that emissions of CO to the atmosphere from the affected facility are maintained at levels less than or equal to 0.15 lb/MMBtu on a steam generating unit operating day average basis. Owners and operators of affected facilities electing to comply with this paragraph must demonstrate compliance according to the procedures specified in paragraphs (j)(4)(i) through (iv) of this section; or

(i) You must monitor CO emissions using a CEMS according to the procedures specified in paragraphs (j)(4)(i)(A) through (D) of this section.

(A) The CO CEMS must be installed, certified, maintained, and operated according to the provisions in §60.58b(i)(3) of subpart Eb of this part.

(B) Each 1-hour CO emissions average is calculated using the data points generated by the CO CEMS expressed in parts per million by volume corrected to 3 percent oxygen (dry basis).

(C) At a minimum, valid 1-hour CO emissions averages must be obtained for at least 90 percent of the operating hours on a 30-day rolling average basis. The 1-hour averages are calculated using the data points required in §60.13(h)(2).

(D) Quarterly accuracy determinations and daily calibration drift tests for the CO CEMS must be performed in accordance with procedure 1 in appendix F of this part.

(ii) You must calculate the 1-hour average CO emissions levels for each steam generating unit operating day by multiplying the average hourly CO output concentration measured by the CO CEMS times the corresponding average hourly flue gas flow rate and divided by the corresponding average hourly heat input to the affected source. The 24-hour average CO emission level is determined by calculating the arithmetic average of the hourly CO emission levels computed for each steam generating unit operating day.

(iii) You must evaluate the preceding 24-hour average CO emission level each steam generating unit operating day excluding periods of affected source startup, shutdown, or malfunction. If the 24-hour average CO emission level is greater than 0.15 lb/MMBtu, you must initiate investigation of the relevant equipment and control systems within 24 hours of the first discovery of the high emission incident and, take the appropriate corrective action as soon as practicable to adjust control settings or repair equipment to reduce the 24-hour average CO emission level to 0.15 lb/MMBtu or less.

(iv) You must record the CO measurements and calculations performed according to paragraph (j)(4) of this section and any corrective actions taken. The record of corrective action taken must include the date and time during which the 24-hour average CO emission level was greater than 0.15 lb/MMBtu, and the date, time, and description of the corrective action.

(5) The affected facility uses a bag leak detection system to monitor the performance of a fabric filter (baghouse) according to the most recent requirements in section §60.48Da of this part; or

(6) The affected facility burns only gaseous fuels or fuel oils that contain less than or equal to 0.30 weight percent sulfur and operates according to a written site-specific monitoring plan approved by the permitting authority. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard.

(k) Owners or operators complying with the PM emission limit by using a PM CEMS must calibrate, maintain, operate, and record the output of the system for PM emissions discharged to the atmosphere as specified in §60.46b(j). The CEMS specified in paragraph §60.46b(j) shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5087, Jan. 28, 2009]

§ 60.49b Reporting and recordkeeping requirements.

(a) The owner or operator of each affected facility shall submit notification of the date of initial startup, as provided by §60.7. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of the fuels to be combusted in the affected facility;

(2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §§60.42b(d)(1), 60.43b(a)(2), (a)(3)(iii), (c)(2)(ii), (d)(2)(iii), 60.44b(c), (d), (e), (i), (j), (k), 60.45b(d), (g), 60.46b(h), or 60.48b(i);

(3) The annual capacity factor at which the owner or operator anticipates operating the facility based on all fuels fired and based on each individual fuel fired; and

(4) Notification that an emerging technology will be used for controlling emissions of SO_2. The Administrator will examine the description of the emerging technology and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42b(a) unless and until this determination is made by the Administrator.

(b) The owner or operator of each affected facility subject to the SO_2, PM, and/or NO_X emission limits under §§60.42b, 60.43b, and 60.44b shall submit to the Administrator the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in appendix B of this part. The owner or operator of each affected facility described in §60.44b(j) or §60.44b(k) shall submit to the Administrator the maximum heat input capacity data from the demonstration of the maximum heat input capacity of the affected facility.

(c) The owner or operator of each affected facility subject to the NO_X standard in §60.44b who seeks to demonstrate compliance with those standards through the monitoring of steam generating unit operating conditions in the provisions of §60.48b(g)(2) shall submit to the Administrator for approval a plan that identifies the operating conditions to be monitored in §60.48b(g)(2) and the records to be maintained in §60.49b(g). This plan shall be submitted to the Administrator for approval within 360 days of the initial startup of the affected facility. An affected facility burning coke oven gas alone or in combination with other gaseous fuels or distillate oil shall submit this plan to the Administrator for approval within 360 days of the initial startup of the affected facility or by November 30, 2009, whichever date comes later. If the plan is approved, the owner or operator shall maintain records of predicted nitrogen oxide emission rates and the monitored operating conditions, including steam generating unit load, identified in the plan. The plan shall:

(1) Identify the specific operating conditions to be monitored and the relationship between these operating conditions and NO_X emission rates (*i.e.* , ng/J or lbs/MMBtu heat input). Steam generating unit operating conditions include, but are not limited to, the degree of staged combustion (*i.e.* , the ratio of primary air to secondary and/or tertiary air) and the level of excess air (*i.e.* , flue gas O_2 level);

(2) Include the data and information that the owner or operator used to identify the relationship between NO_X emission rates and these operating conditions; and

(3) Identify how these operating conditions, including steam generating unit load, will be monitored under §60.48b(g) on an hourly basis by the owner or operator during the period of operation of the affected facility; the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam generating unit load, that will be maintained by the owner or operator under §60.49b(g).

(d) Except as provided in paragraph (d)(2) of this section, the owner or operator of an affected facility shall record and maintain records as specified in paragraph (d)(1) of this section.

(1) The owner or operator of an affected facility shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for coal, distillate oil, residual oil, natural gas, wood, and municipal-type solid waste for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.

(2) As an alternative to meeting the requirements of paragraph (d)(1) of this section, the owner or operator of an affected facility that is subject to a federally enforceable permit restricting fuel use to a single fuel such that the facility is not required to continuously monitor any emissions (excluding opacity) or parameters indicative of emissions may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

(e) For an affected facility that combusts residual oil and meets the criteria under §§60.46b(e)(4), 60.44b(j), or (k), the owner or operator shall maintain records of the nitrogen content of the residual oil combusted in the affected facility and calculate the average fuel nitrogen content for the reporting period. The nitrogen content shall be determined using ASTM Method D4629 (incorporated by reference, see §60.17), or fuel suppliers. If residual oil blends are being combusted, fuel nitrogen specifications may be prorated based on the ratio of residual oils of different nitrogen content in the fuel blend.

(f) For an affected facility subject to the opacity standard in §60.43b, the owner or operator shall maintain records of opacity. In addition, an owner or operator that elects to monitor emissions according to the requirements in §60.48b(a) shall maintain records according to the requirements specified in paragraphs (f)(1) through (3) of this section, as applicable to the visible emissions monitoring method used.

(1) For each performance test conducted using Method 9 of appendix A–4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (f)(1)(i) through (iii) of this section.

(i) Dates and time intervals of all opacity observation periods;

(ii) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

(iii) Copies of all visible emission observer opacity field data sheets;

(2) For each performance test conducted using Method 22 of appendix A–4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (f)(2)(i) through (iv) of this section.

(i) Dates and time intervals of all visible emissions observation periods;

(ii) Name and affiliation for each visible emission observer participating in the performance test;

(iii) Copies of all visible emission observer opacity field data sheets; and

(iv) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the owner or operator to demonstrate compliance with the applicable monitoring requirements.

(3) For each digital opacity compliance system, the owner or operator shall maintain records and submit reports according to the requirements specified in the site-specific monitoring plan approved by the Administrator.

(g) Except as provided under paragraph (p) of this section, the owner or operator of an affected facility subject to the NO_Xstandards under §60.44b shall maintain records of the following information for each steam generating unit operating day:

(1) Calendar date;

(2) The average hourly NO_Xemission rates (expressed as NO_2) (ng/J or lb/MMBtu heat input) measured or predicted;

(3) The 30-day average NO_Xemission rates (ng/J or lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;

(4) Identification of the steam generating unit operating days when the calculated 30-day average NO_Xemission rates are in excess of the NO_Xemissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;

(5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;

(6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;

(7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;

(8) Identification of the times when the pollutant concentration exceeded full span of the CEMS;

(9) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and

(10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.

(h) The owner or operator of any affected facility in any category listed in paragraphs (h)(1) or (2) of this section is required to submit excess emission reports for any excess emissions that occurred during the reporting period.

(1) Any affected facility subject to the opacity standards in §60.43b(f) or to the operating parameter monitoring requirements in §60.13(i)(1).

(2) Any affected facility that is subject to the NO_Xstandard of §60.44b, and that:

(i) Combusts natural gas, distillate oil, gasified coal, or residual oil with a nitrogen content of 0.3 weight percent or less; or

(ii) Has a heat input capacity of 73 MW (250 MMBtu/hr) or less and is required to monitor NO_Xemissions on a continuous basis under §60.48b(g)(1) or steam generating unit operating conditions under §60.48b(g)(2).

(3) For the purpose of §60.43b, excess emissions are defined as all 6-minute periods during which the average opacity exceeds the opacity standards under §60.43b(f).

(4) For purposes of §60.48b(g)(1), excess emissions are defined as any calculated 30-day rolling average NO_Xemission rate, as determined under §60.46b(e), that exceeds the applicable emission limits in §60.44b.

(i) The owner or operator of any affected facility subject to the continuous monitoring requirements for NO_Xunder §60.48(b) shall submit reports containing the information recorded under paragraph (g) of this section.

(j) The owner or operator of any affected facility subject to the SO_2standards under §60.42b shall submit reports.

(k) For each affected facility subject to the compliance and performance testing requirements of §60.45b and the reporting requirement in paragraph (j) of this section, the following information shall be reported to the Administrator:

(1) Calendar dates covered in the reporting period;

(2) Each 30-day average SO_2emission rate (ng/J or lb/MMBtu heat input) measured during the reporting period, ending with the last 30-day period; reasons for noncompliance with the emission standards; and a description of corrective actions taken; For an exceedance due to maintenance of the SO_2control system covered in paragraph 60.45b(a), the report shall identify the days on which the maintenance was performed and a description of the maintenance;

(3) Each 30-day average percent reduction in SO_2emissions calculated during the reporting period, ending with the last 30-day period; reasons for noncompliance with the emission standards; and a description of corrective actions taken;

(4) Identification of the steam generating unit operating days that coal or oil was combusted and for which SO_2or diluent (O_2or CO_2) data have not been obtained by an approved method for at least 75 percent of the operating hours in the steam generating unit operating day; justification for not obtaining sufficient data; and description of corrective action taken;

(5) Identification of the times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and description of corrective action taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit;

(6) Identification of “F” factor used for calculations, method of determination, and type of fuel combusted;

(7) Identification of times when hourly averages have been obtained based on manual sampling methods;

(8) Identification of the times when the pollutant concentration exceeded full span of the CEMS;

(9) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3;

(10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part; and

(11) The annual capacity factor of each fired as provided under paragraph (d) of this section.

(l) For each affected facility subject to the compliance and performance testing requirements of §60.45b(d) and the reporting requirements of paragraph (j) of this section, the following information shall be reported to the Administrator:

(1) Calendar dates when the facility was in operation during the reporting period;

(2) The 24-hour average SO_2emission rate measured for each steam generating unit operating day during the reporting period that coal or oil was combusted, ending in the last 24-hour period in the quarter; reasons for noncompliance with the emission standards; and a description of corrective actions taken;

(3) Identification of the steam generating unit operating days that coal or oil was combusted for which $S0_2$or diluent (O_2or CO_2) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and description of corrective action taken;

(4) Identification of the times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and description of corrective action taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit;

(5) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;

(6) Identification of times when hourly averages have been obtained based on manual sampling methods;

(7) Identification of the times when the pollutant concentration exceeded full span of the CEMS;

(8) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and

(9) Results of daily CEMS drift tests and quarterly accuracy assessments as required under Procedure 1 of appendix F 1 of this part. If the owner or operator elects to implement the alternative data assessment procedures described in §§60.47b(e)(4)(i) through (e)(4)(iii), each data assessment report shall include a summary of the results of all of the RATAs, linearity checks, CGAs, and calibration error or drift assessments required by §§60.47b(e)(4)(i) through (e)(4)(iii).

(m) For each affected facility subject to the SO_2standards in §60.42(b) for which the minimum amount of data required in §60.47b(c) were not obtained during the reporting period, the following information is reported to the Administrator in addition to that required under paragraph (k) of this section:

(1) The number of hourly averages available for outlet emission rates and inlet emission rates;

(2) The standard deviation of hourly averages for outlet emission rates and inlet emission rates, as determined in Method 19 of appendix A of this part, section 7;

(3) The lower confidence limit for the mean outlet emission rate and the upper confidence limit for the mean inlet emission rate, as calculated in Method 19 of appendix A of this part, section 7; and

(4) The ratio of the lower confidence limit for the mean outlet emission rate and the allowable emission rate, as determined in Method 19 of appendix A of this part, section 7.

(n) If a percent removal efficiency by fuel pretreatment (*i.e.* , $\%R_f$) is used to determine the overall percent reduction (*i.e.* , $\%R_o$) under §60.45b, the owner or operator of the affected facility shall submit a signed statement with the report.

(1) Indicating what removal efficiency by fuel pretreatment (*i.e.* , $\%R_f$) was credited during the reporting period;

(2) Listing the quantity, heat content, and date each pre-treated fuel shipment was received during the reporting period, the name and location of the fuel pretreatment facility; and the total quantity and total heat content of all fuels received at the affected facility during the reporting period;

(3) Documenting the transport of the fuel from the fuel pretreatment facility to the steam generating unit; and

(4) Including a signed statement from the owner or operator of the fuel pretreatment facility certifying that the percent removal efficiency achieved by fuel pretreatment was determined in accordance with the provisions of Method 19 of appendix A of this part and listing the heat content and sulfur content of each fuel before and after fuel pretreatment.

(o) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of 2 years following the date of such record.

(p) The owner or operator of an affected facility described in §60.44b(j) or (k) shall maintain records of the following information for each steam generating unit operating day:

(1) Calendar date;

(2) The number of hours of operation; and

(3) A record of the hourly steam load.

(q) The owner or operator of an affected facility described in §60.44b(j) or §60.44b(k) shall submit to the Administrator a report containing:

(1) The annual capacity factor over the previous 12 months;

(2) The average fuel nitrogen content during the reporting period, if residual oil was fired; and

(3) If the affected facility meets the criteria described in §60.44b(j), the results of any NO_Xemission tests required during the reporting period, the hours of operation during the reporting period, and the hours of operation since the last NO_Xemission test.

(r) The owner or operator of an affected facility who elects to use the fuel based compliance alternatives in §60.42b or §60.43b shall either:

(1) The owner or operator of an affected facility who elects to demonstrate that the affected facility combusts only very low sulfur oil, natural gas, wood, a mixture of these fuels, or any of these fuels (or a mixture of these fuels) in combination with other fuels that are known to contain an insignificant amount of sulfur in §60.42b(j) or §60.42b(k) shall obtain and maintain at the affected facility fuel receipts from the fuel supplier that certify that the oil meets the definition of distillate oil and gaseous fuel meets the definition of natural gas as defined in §60.41b and the applicable sulfur limit. For the purposes of this section, the distillate oil need not meet the fuel nitrogen content specification in the definition of distillate oil. Reports shall be submitted to the Administrator certifying that only very low sulfur oil meeting this definition, natural gas, wood, and/or other fuels that are known to contain insignificant amounts of sulfur were combusted in the affected facility during the reporting period; or

(2) The owner or operator of an affected facility who elects to demonstrate compliance based on fuel analysis in §60.42b or §60.43b shall develop and submit a site-specific fuel analysis plan to the Administrator for review and approval no later than 60 days before the date you intend to demonstrate compliance. Each fuel analysis plan shall include a minimum initial requirement of weekly testing and each analysis report shall contain, at a minimum, the following information:

(i) The potential sulfur emissions rate of the representative fuel mixture in ng/J heat input;

(ii) The method used to determine the potential sulfur emissions rate of each constituent of the mixture. For distillate oil and natural gas a fuel receipt or tariff sheet is acceptable;

(iii) The ratio of different fuels in the mixture; and

(iv) The owner or operator can petition the Administrator to approve monthly or quarterly sampling in place of weekly sampling.

(s) Facility specific NO_Xstandard for Cytec Industries Fortier Plant's C.AOG incinerator located in Westwego, Louisiana:

(1) *Definitions* .

Oxidation zone is defined as the portion of the C.AOG incinerator that extends from the inlet of the oxidizing zone combustion air to the outlet gas stack.

Reducing zone is defined as the portion of the C.AOG incinerator that extends from the burner section to the inlet of the oxidizing zone combustion air.

Total inlet air is defined as the total amount of air introduced into the C.AOG incinerator for combustion of natural gas and chemical by-product waste and is equal to the sum of the air flow into the reducing zone and the air flow into the oxidation zone.

(2) *Standard for nitrogen oxides* . (i) When fossil fuel alone is combusted, the NO_Xemission limit for fossil fuel in §60.44b(a) applies.

(ii) When natural gas and chemical by-product waste are simultaneously combusted, the NO_Xemission limit is 289 ng/J (0.67 lb/MMBtu) and a maximum of 81 percent of the total inlet air provided for combustion shall be provided to the reducing zone of the C.AOG incinerator.

(3) *Emission monitoring* . (i) The percent of total inlet air provided to the reducing zone shall be determined at least every 15 minutes by measuring the air flow of all the air entering the reducing zone and the air flow of all the air entering the oxidation zone, and compliance with the percentage of total inlet air that is provided to the reducing zone shall be determined on a 3-hour average basis.

(ii) The NO_Xemission limit shall be determined by the compliance and performance test methods and procedures for NO_Xin §60.46b(i).

(iii) The monitoring of the NO_Xemission limit shall be performed in accordance with §60.48b.

(4) *Reporting and recordkeeping requirements* . (i) The owner or operator of the C.AOG incinerator shall submit a report on any excursions from the limits required by paragraph (a)(2) of this section to the Administrator with the quarterly report required by paragraph (i) of this section.

(ii) The owner or operator of the C.AOG incinerator shall keep records of the monitoring required by paragraph (a)(3) of this section for a period of 2 years following the date of such record.

(iii) The owner of operator of the C.AOG incinerator shall perform all the applicable reporting and recordkeeping requirements of this section.

(t) Facility-specific NO_Xstandard for Rohm and Haas Kentucky Incorporated's Boiler No. 100 located in Louisville, Kentucky:

(1) *Definitions* .

Air ratio control damper is defined as the part of the low NO_Xburner that is adjusted to control the split of total combustion air delivered to the reducing and oxidation portions of the combustion flame.

Flue gas recirculation line is defined as the part of Boiler No. 100 that recirculates a portion of the boiler flue gas back into the combustion air.

(2) *Standard for nitrogen oxides* . (i) When fossil fuel alone is combusted, the NO_Xemission limit for fossil fuel in §60.44b(a) applies.

(ii) When fossil fuel and chemical by-product waste are simultaneously combusted, the NO_Xemission limit is 473 ng/J (1.1 lb/MMBtu), and the air ratio control damper tee handle shall be at a minimum of 5 inches (12.7 centimeters) out of the boiler, and the flue gas recirculation line shall be operated at a minimum of 10 percent open as indicated by its valve opening position indicator.

(3) *Emission monitoring for nitrogen oxides* . (i) The air ratio control damper tee handle setting and the flue gas recirculation line valve opening position indicator setting shall be recorded during each 8-hour operating shift.

(ii) The NO_Xemission limit shall be determined by the compliance and performance test methods and procedures for NO_Xin §60.46b.

(iii) The monitoring of the NO_Xemission limit shall be performed in accordance with §60.48b.

(4) *Reporting and recordkeeping requirements* . (i) The owner or operator of Boiler No. 100 shall submit a report on any excursions from the limits required by paragraph (b)(2) of this section to the Administrator with the quarterly report required by §60.49b(i).

(ii) The owner or operator of Boiler No. 100 shall keep records of the monitoring required by paragraph (b)(3) of this section for a period of 2 years following the date of such record.

(iii) The owner of operator of Boiler No. 100 shall perform all the applicable reporting and recordkeeping requirements of §60.49b.

(u) *Site-specific standard for Merck & Co., Inc.'s Stonewall Plant in Elkton, Virginia* . (1) This paragraph (u) applies only to the pharmaceutical manufacturing facility, commonly referred to as the Stonewall Plant, located at Route 340 South, in Elkton, Virginia (“site”) and only to the natural gas-fired boilers installed as part of the powerhouse conversion required pursuant to 40 CFR 52.2454(g). The requirements of this paragraph shall apply, and the requirements of §§60.40b through 60.49b(t) shall not apply, to the natural gas-fired boilers installed pursuant to 40 CFR 52.2454(g).

(i) The site shall equip the natural gas-fired boilers with low NO_Xtechnology.

(ii) The site shall install, calibrate, maintain, and operate a continuous monitoring and recording system for measuring NO_Xemissions discharged to the atmosphere and opacity using a continuous emissions monitoring system or a predictive emissions monitoring system.

(iii) Within 180 days of the completion of the powerhouse conversion, as required by 40 CFR 52.2454, the site shall perform a performance test to quantify criteria pollutant emissions.

(2) [Reserved]

(v) The owner or operator of an affected facility may submit electronic quarterly reports for $SO_2$and/or $NO_X$and/or opacity in lieu of submitting the written reports required under paragraphs (h), (i), (j), (k) or (l) of this section. The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format.

(w) The reporting period for the reports required under this subpart is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

(x) Facility-specific NO_Xstandard for Weyerhaeuser Company's No. 2 Power Boiler located in New Bern, North Carolina:

(1) *Standard for nitrogen oxides* . (i) When fossil fuel alone is combusted, the NO_Xemission limit for fossil fuel in §60.44b(a) applies.

(ii) When fossil fuel and chemical by-product waste are simultaneously combusted, the NO_Xemission limit is 215 ng/J (0.5 lb/MMBtu).

(2) *Emission monitoring for nitrogen oxides* . (i) The NO_Xemissions shall be determined by the compliance and performance test methods and procedures for NO_Xin §60.46b.

(ii) The monitoring of the NO_Xemissions shall be performed in accordance with §60.48b.

(3) *Reporting and recordkeeping requirements* . (i) The owner or operator of the No. 2 Power Boiler shall submit a report on any excursions from the limits required by paragraph (x)(2) of this section to the Administrator with the quarterly report required by §60.49b(i).

(ii) The owner or operator of the No. 2 Power Boiler shall keep records of the monitoring required by paragraph (x)(3) of this section for a period of 2 years following the date of such record.

(iii) The owner or operator of the No. 2 Power Boiler shall perform all the applicable reporting and recordkeeping requirements of §60.49b.

(y) Facility-specific NO_Xstandard for INEOS USA's AOGI located in Lima, Ohio:

(1) *Standard for NO* $_X$. (i) When fossil fuel alone is combusted, the NO_Xemission limit for fossil fuel in §60.44b(a) applies.

(ii) When fossil fuel and chemical byproduct/waste are simultaneously combusted, the NO_Xemission limit is 645 ng/J (1.5 lb/MMBtu).

(2) *Emission monitoring for NO_X*. (i) The NO_X emissions shall be determined by the compliance and performance test methods and procedures for NO_X in §60.46b.

(ii) The monitoring of the NO_X emissions shall be performed in accordance with §60.48b.

(3) *Reporting and recordkeeping requirements* . (i) The owner or operator of the AOGI shall submit a report on any excursions from the limits required by paragraph (y)(2) of this section to the Administrator with the quarterly report required by paragraph (i) of this section.

(ii) The owner or operator of the AOGI shall keep records of the monitoring required by paragraph (y)(3) of this section for a period of 2 years following the date of such record.

(iii) The owner or operator of the AOGI shall perform all the applicable reporting and recordkeeping requirements of this section.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5089, Jan. 28, 2009]

Attachment B – New Source Performance Standards: Standards of Performance for Coal Preparation and Processing Plants [40 CFR 60 Subpart Y] [326 IAC 12]

Source Description and Location

Source Name: Northern Indiana Public Service Company - Michigan City Generating Station
Source Location: 101 Wabash Street, Michigan City, IN 46360
County: LaPorte

NSPS [40 CFR Part 60, Subpart Y]

Subpart Y—Standards of Performance for Coal Preparation and Processing Plants

Source: 74 FR 51977, Oct. 8, 2009, unless otherwise noted.

§ 60.250 Applicability and designation of affected facility.

(a) The provisions of this subpart apply to affected facilities in coal preparation and processing plants that process more than 181 megagrams (Mg) (200 tons) of coal per day.

(b) The provisions in §60.251, §60.252(a), §60.253(a), §60.254(a), §60.255(a), and §60.256(a) of this subpart are applicable to any of the following affected facilities that commenced construction, reconstruction or modification after October 27, 1974, and on or before April 28, 2008: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), and coal storage systems, transfer and loading systems.

(c) The provisions in §60.251, §60.252(b)(1) and (c), §60.253(b), §60.254(b), §60.255(b) through (h), §60.256(b) and (c), §60.257, and §60.258 of this subpart are applicable to any of the following affected facilities that commenced construction, reconstruction or modification after April 28, 2008, and on or before May 27, 2009: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), and coal storage systems, transfer and loading systems.

(d) The provisions in §60.251, §60.252(b)(1) through (3), and (c), §60.253(b), §60.254(b) and (c), §60.255(b) through (h), §60.256(b) and (c), §60.257, and §60.258 of this subpart are applicable to any of the following affected facilities that commenced construction, reconstruction or modification after May 27, 2009: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), coal storage systems, transfer and loading systems, and open storage piles.

§ 60.251 Definitions.

As used in this subpart, all terms not defined herein have the meaning given them in the Clean Air Act (Act) and in subpart A of this part.

(a) *Anthracite* means coal that is classified as anthracite according to the American Society of Testing and Materials in ASTM D388 (incorporated by reference, *see* §60.17).

(b) *Bag leak detection system* means a system that is capable of continuously monitoring relative particulate matter (dust loadings) in the exhaust of a fabric filter to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

(c) *Bituminous coal* means solid fossil fuel classified as bituminous coal by ASTM D388 (incorporated by reference— *see* §60.17).

(d) *Coal* means:

(1) For units constructed, reconstructed, or modified on or before May 27, 2009, all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D388 (incorporated by reference— *see* §60.17).

(2) For units constructed, reconstructed, or modified after May 27, 2009, all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D388 (incorporated by reference— *see* §60.17), and coal refuse.

(e) *Coal preparation and processing plant* means any facility (excluding underground mining operations) which prepares coal by one or more of the following processes: breaking, crushing, screening, wet or dry cleaning, and thermal drying.

(f) *Coal processing and conveying equipment* means any machinery used to reduce the size of coal or to separate coal from refuse, and the equipment used to convey coal to or remove coal and refuse from the machinery. This includes, but is not limited to, breakers, crushers, screens, and conveyor belts. Equipment located at the mine face is not considered to be part of the coal preparation and processing plant.

(g) *Coal refuse* means waste products of coal mining, physical coal cleaning, and coal preparation operations (*e.g.* culm, gob, *etc.*) containing coal, matrix material, clay, and other organic and inorganic material.

(h) *Coal storage system* means any facility used to store coal except for open storage piles.

(i) *Design controlled potential PM emissions rate* means the theoretical particulate matter (PM) emissions (Mg) that would result from the operation of a control device at its design emissions rate (grams per dry standard cubic meter (g/dscm)), multiplied by the maximum design flow rate (dry standard cubic meter per minute (dscm/min)), multiplied by 60 (minutes per hour (min/hr)), multiplied by 8,760 (hours per year (hr/yr)), divided by 1,000,000 (megagrams per gram (Mg/g)).

(j) *Indirect thermal dryer* means a thermal dryer that reduces the moisture content of coal through indirect heating of the coal through contact with a heat transfer medium. If the source of heat (the source of combustion or furnace) is subject to another subpart of this part, then the furnace and the associated emissions are not part of the affected facility. However, if the source of heat is not subject to another subpart of this part, then the furnace and the associated emissions are part of the affected facility.

(k) *Lignite* means coal that is classified as lignite A or B according to the American Society of Testing and Materials in ASTM D388 (incorporated by reference, *see* §60.17).

(l) *Mechanical vent* means any vent that uses a powered mechanical drive (machine) to induce air flow.

(m) *Open storage pile* means any facility, including storage area, that is not enclosed that is used to store coal, including the equipment used in the loading, unloading, and conveying operations of the facility.

(n) *Operating day* means a 24-hour period between 12 midnight and the following midnight during which coal is prepared or processed at any time by the affected facility. It is not necessary that coal be prepared or processed the entire 24-hour period.

(o) *Pneumatic coal-cleaning equipment* means:

(1) For units constructed, reconstructed, or modified on or before May 27, 2009, any facility which classifies bituminous coal by size or separates bituminous coal from refuse by application of air stream(s).

(2) For units constructed, reconstructed, or modified after May 27, 2009, any facility which classifies coal by size or separates coal from refuse by application of air stream(s).

(p) *Potential combustion concentration* means the theoretical emissions (nanograms per joule (ng/J) or pounds per million British thermal units (lb/MMBtu) heat input) that would result from combustion of a fuel in an uncleaned state without emission control systems, as determined using Method 19 of appendix A–7 of this part.

(q) *Subbituminous coal* means coal that is classified as subbituminous A, B, or C according to the American Society of Testing and Materials in ASTM D388 (incorporated by reference, *see* §60.17).

(r) *Thermal dryer* means:

(1) For units constructed, reconstructed, or modified on or before May 27, 2009, any facility in which the moisture content of bituminous coal is reduced by contact with a heated gas stream which is exhausted to the atmosphere.

(2) For units constructed, reconstructed, or modified after May 27, 2009, any facility in which the moisture content of coal is reduced by either contact with a heated gas stream which is exhausted to the atmosphere or through indirect heating of the coal through contact with a heated heat transfer medium.

(s) *Transfer and loading system* means any facility used to transfer and load coal for shipment.

§ 60.252 Standards for thermal dryers.

(a) On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of a thermal dryer constructed, reconstructed, or modified on or before April 28, 2008, subject to the provisions of this subpart must meet the requirements in paragraphs (a)(1) and (a)(2) of this section.

(1) The owner or operator shall not cause to be discharged into the atmosphere from the thermal dryer any gases which contain PM in excess of 0.070 g/dscm (0.031 grains per dry standard cubic feet (gr/dscf)); and

(2) The owner or operator shall not cause to be discharged into the atmosphere from the thermal dryer any gases which exhibit 20 percent opacity or greater.

(b) Except as provided in paragraph (c) of this section, on and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of a thermal dryer constructed, reconstructed, or modified after April 28, 2008, subject to the provisions of this subpart must meet the applicable standards for PM and opacity, as specified in paragraph (b)(1) of this section. In addition, and except as provided in paragraph (c) of this section, on and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of a thermal dryer constructed, reconstructed, or modified after May 29, 2009, subject to the provisions of this subpart must also meet the applicable standards for sulfur dioxide (SO_2), and combined nitrogen oxides (NO_X) and carbon monoxide (CO) as specified in paragraphs (b)(2) and (b)(3) of this section.

(1) The owner or operator must meet the requirements for PM emissions in paragraphs (b)(1)(i) through (iii) of this section, as applicable to the affected facility.

(i) For each thermal dryer constructed or reconstructed after April 28, 2008, the owner or operator must meet the requirements of (b)(1)(i)(A) and (b)(1)(i)(B).

(A) The owner or operator must not cause to be discharged into the atmosphere from the thermal dryer any gases that contain PM in excess of 0.023 g/dscm (0.010 grains per dry standard cubic feet (gr/dscf)); and

(B) The owner or operator must not cause to be discharged into the atmosphere from the thermal dryer any gases that exhibit 10 percent opacity or greater.

(ii) For each thermal dryer modified after April 28, 2008, the owner or operator must meet the requirements of paragraphs (b)(1)(ii)(A) and (b)(1)(ii)(B) of this section.

(A) The owner or operator must not cause to be discharged to the atmosphere from the affected facility any gases which contain PM in excess of 0.070 g/dscm (0.031 gr/dscf); and

(B) The owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 20 percent opacity or greater.

(2) Except as provided in paragraph (b)(2)(iii) of this section, for each thermal dryer constructed, reconstructed, or modified after May 27, 2009, the owner or operator must meet the requirements for SO_2emissions in either paragraph (b)(2)(i) or (b)(2)(ii) of this section.

(i) The owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2in excess of 85 ng/J (0.20 lb/MMBtu) heat input; or

(ii) The owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases that either contain SO_2in excess of 520 ng/J (1.20 lb/MMBtu) heat input or contain SO_2in excess of 10 percent of the potential combustion concentration (*i.e.,* the facility must achieve at least a 90 percent reduction of the potential combustion concentration and may not exceed a maximum emissions rate of 1.2 lb/MMBtu (520 ng/J)).

(iii) Thermal dryers that receive all of their thermal input from a source other than coal or residual oil, that receive all of their thermal input from a source subject to an SO_2limit under another subpart of this part, or that use waste heat or residual from the combustion of coal or residual oil as their only thermal input are not subject to the SO_2limits of this section.

(3) Except as provided in paragraph (b)(3)(iii) of this section, the owner or operator must meet the requirements for combined $NO_X$and CO emissions in paragraph (b)(3)(i) or (b)(3)(ii) of this section, as applicable to the affected facility.

(i) For each thermal dryer constructed after May 27, 2009, the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which contain a combined concentration of $NO_X$and CO in excess of 280 ng/J (0.65 lb/MMBtu) heat input.

(ii) For each thermal dryer reconstructed or modified after May 27, 2009, the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which contain combined concentration of $NO_X$and CO in excess of 430 ng/J (1.0 lb/MMBtu) heat input.

(iii) Thermal dryers that receive all of their thermal input from a source other than coal or residual oil, that receive all of their thermal input from a source subject to a NO_Xlimit and/or CO limit under another subpart of this part, or that use waste heat or residual from the combustion of coal or residual oil as their only thermal input, are not subject to the combined $NO_X$and CO limits of this section.

(c) Thermal dryers receiving all of their thermal input from an affected facility covered under another 40 CFR Part 60 subpart must meet the applicable requirements in that subpart but are not subject to the requirements in this subpart.

§ 60.253 Standards for pneumatic coal-cleaning equipment.

(a) On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of pneumatic coal-cleaning equipment constructed, reconstructed, or modified on or before April 28, 2008, must meet the requirements of paragraphs (a)(1) and (a)(2) of this section.

(1) The owner or operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that contain PM in excess of 0.040 g/dscm (0.017 gr/dscf); and

(2) The owner or operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that exhibit 10 percent opacity or greater.

(b) On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of pneumatic coal-cleaning equipment constructed, reconstructed, or modified after April 28, 2008, must meet the requirements in paragraphs (b)(1) and (b)(2) of this section.

(1) The owner of operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that contain PM in excess or 0.023 g/dscm (0.010 gr/dscf); and

(2) The owner or operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that exhibit greater than 5 percent opacity.

§ 60.254 Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems, and open storage piles.

(a) On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified on or before April 28, 2008, gases which exhibit 20 percent opacity or greater.

(b) On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified after April 28, 2008, must meet the requirements in paragraphs (b)(1) through (3) of this section, as applicable to the affected facility.

(1) Except as provided in paragraph (b)(3) of this section, the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 10 percent opacity or greater.

(2) The owner or operator must not cause to be discharged into the atmosphere from any mechanical vent on an affected facility gases which contain particulate matter in excess of 0.023 g/dscm (0.010 gr/dscf).

(3) Equipment used in the loading, unloading, and conveying operations of open storage piles are not subject to the opacity limitations of paragraph (b)(1) of this section.

(c) The owner or operator of an open storage pile, which includes the equipment used in the loading, unloading, and conveying operations of the affected facility, constructed, reconstructed, or modified after May 27, 2009, must prepare and operate in accordance with a submitted fugitive coal dust emissions control plan that is appropriate for the site conditions as specified in paragraphs (c)(1) through (6) of this section.

(1) The fugitive coal dust emissions control plan must identify and describe the control measures the owner or operator will use to minimize fugitive coal dust emissions from each open storage pile.

(2) For open coal storage piles, the fugitive coal dust emissions control plan must require that one or more of the following control measures be used to minimize to the greatest extent practicable fugitive coal dust: Locating the source inside a partial enclosure, installing and operating a water spray or fogging system, applying appropriate chemical dust suppression agents on the source (when the provisions of paragraph (c)(6) of this section are met), use of a wind barrier, compaction, or use of a vegetative cover. The owner or operator must select, for inclusion in the fugitive coal dust emissions control plan, the control measure or measures listed in this paragraph that are most appropriate for site conditions. The plan must also explain how the measure or measures selected are applicable and appropriate for site conditions. In addition, the plan must be revised as needed to reflect any changing conditions at the source.

(3) Any owner or operator of an affected facility that is required to have a fugitive coal dust emissions control plan may petition the Administrator to approve, for inclusion in the plan for the affected facility, alternative control measures other than those specified in paragraph (c)(2) of this section as specified in paragraphs (c)(3)(i) through (iv) of this section.

(i) The petition must include a description of the alternative control measures, a copy of the fugitive coal dust emissions control plan for the affected facility that includes the alternative control measures, and information sufficient for EPA to evaluate the demonstrations required by paragraph (c)(3)(ii) of this section.

(ii) The owner or operator must either demonstrate that the fugitive coal dust emissions control plan that includes the alternate control measures will provide equivalent overall environmental protection or demonstrate that it is either economically or technically infeasible for the affected facility to use the control measures specifically identified in paragraph (c)(2).

(iii) While the petition is pending, the owner or operator must comply with the fugitive coal dust emissions control plan including the alternative control measures submitted with the petition. Operation in accordance with the plan submitted with the petition shall be deemed to constitute compliance with the requirement to operate in accordance with a fugitive coal dust emissions control plan that contains one of the control measures specifically identified in paragraph (c)(2) of this section while the petition is pending.

(iv) If the petition is approved by the Administrator, the alternative control measures will be approved for inclusion in the fugitive coal dust emissions control plan for the affected facility. In lieu of amending this subpart, a letter will be sent to the facility describing the specific control measures approved. The facility shall make any such letters and the applicable fugitive coal dust emissions control plan available to the public. If the Administrator determines it is appropriate, the conditions and requirements of the letter can be reviewed and changed at any point.

(4) The owner or operator must submit the fugitive coal dust emissions control plan to the Administrator or delegated authority as specified in paragraphs (c)(4)(i) and (c)(4)(ii) of this section.

(i) The plan must be submitted to the Administrator or delegated authority prior to startup of the new, reconstructed, or modified affected facility, or 30 days after the effective date of this rule, whichever is later.

(ii) The plan must be revised as needed to reflect any changing conditions at the source. Such revisions must be dated and submitted to the Administrator or delegated authority before a source can operate pursuant to these revisions. The Administrator or delegated authority may also object to such revisions as specified in paragraph (c)(5) of this section.

(5) The Administrator or delegated authority may object to the fugitive coal dust emissions control plan as specified in paragraphs (c)(5)(i) and (c)(5)(ii) of this section.

(i) The Administrator or delegated authority may object to any fugitive coal dust emissions control plan that it has determined does not meet the requirements of paragraphs (c)(1) and (c)(2) of this section.

(ii) If an objection is raised, the owner or operator, within 30 days from receipt of the objection, must submit a revised fugitive coal dust emissions control plan to the Administrator or delegated authority. The owner or operator must operate in accordance with the revised fugitive coal dust emissions control plan. The Administrator or delegated authority retain the right, under paragraph (c)(5) of this section, to object to the revised control plan if it determines the plan does not meet the requirements of paragraphs (c)(1) and (c)(2) of this section.

(6) Where appropriate chemical dust suppression agents are selected by the owner or operator as a control measure to minimize fugitive coal dust emissions, (1) only chemical dust suppressants with Occupational Safety and Health Administration (OSHA)-compliant material safety data sheets (MSDS) are to be allowed; (2) the MSDS must be included in the fugitive coal dust emissions control plan; and (3) the owner or operator must consider and document in the fugitive coal dust emissions control plan the site-specific impacts associated with the use of such chemical dust suppressants.

§ 60.255 Performance tests and other compliance requirements.

(a) An owner or operator of each affected facility that commenced construction, reconstruction, or modification on or before April 28, 2008, must conduct all performance tests required by §60.8 to demonstrate compliance with the applicable emission standards using the methods identified in §60.257.

(b) An owner or operator of each affected facility that commenced construction, reconstruction, or modification after April 28, 2008, must conduct performance tests according to the requirements of §60.8 and the methods identified in §60.257 to demonstrate compliance with the applicable emissions standards in this subpart as specified in paragraphs (b)(1) and (2) of this section.

(1) For each affected facility subject to a PM, SO_2, or combined $NO_X$and CO emissions standard, an initial performance test must be performed. Thereafter, a new performance test must be conducted according the requirements in paragraphs (b)(1)(i) through (iii) of this section, as applicable.

(i) If the results of the most recent performance test demonstrate that emissions from the affected facility are greater than 50 percent of the applicable emissions standard, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed.

(ii) If the results of the most recent performance test demonstrate that emissions from the affected facility are 50 percent or less of the applicable emissions standard, a new performance test must be conducted within 24 calendar months of the date that the previous performance test was required to be completed.

(iii) An owner or operator of an affected facility that has not operated for the 60 calendar days prior to the due date of a performance test is not required to perform the subsequent performance test until 30 calendar days after the next operating day.

(2) For each affected facility subject to an opacity standard, an initial performance test must be performed. Thereafter, a new performance test must be conducted according to the requirements in paragraphs (b)(2)(i) through (iii) of this section, as applicable, except as provided for in paragraphs (e) and (f) of this section. Performance test and other compliance requirements for coal truck dump operations are specified in paragraph (h) of this section.

(i) If any 6-minute average opacity reading in the most recent performance test exceeds half the applicable opacity limit, a new performance test must be conducted within 90 operating days of the date that the previous performance test was required to be completed.

(ii) If all 6-minute average opacity readings in the most recent performance test are equal to or less than half the applicable opacity limit, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed.

(iii) An owner or operator of an affected facility continuously monitoring scrubber parameters as specified in §60.256(b)(2) is exempt from the requirements in paragraphs (b)(2)(i) and (ii) if opacity performance tests are conducted concurrently with (or within a 60-minute period of) PM performance tests.

(c) If any affected coal processing and conveying equipment (*e.g.,* breakers, crushers, screens, conveying systems), coal storage systems, or coal transfer and loading systems that commenced construction, reconstruction, or modification after April 28, 2008, are enclosed in a building, and emissions from the building do not exceed any of the standards in *§* 60.254 that apply to the affected facility, then the facility shall be deemed to be in compliance with such standards.

(d) An owner or operator of an affected facility (other than a thermal dryer) that commenced construction, reconstruction, or modification after April 28, 2008, is subject to a PM emission standard and uses a control device with a design controlled potential PM emissions rate of 1.0 Mg (1.1 tons) per year or less is exempted from the requirements of paragraphs (b)(1)(i) and (ii) of this section provided that the owner or operator meets all of the conditions specified in paragraphs (d)(1) through (3) of this section. This exemption does not apply to thermal dryers.

(1) PM emissions, as determined by the most recent performance test, are less than or equal to the applicable limit,

(2) The control device manufacturer's recommended maintenance procedures are followed, and

(3) All 6-minute average opacity readings from the most recent performance test are equal to or less than half the applicable opacity limit or the monitoring requirements in paragraphs (e) or (f) of this section are followed.

(e) For an owner or operator of a group of up to five of the same type of affected facilities that commenced construction, reconstruction, or modification after April 28, 2008, that are subject to PM emissions standards and use identical control devices, the Administrator or delegated authority may allow the owner or operator to use a single PM performance test for one of the affected control devices to demonstrate that the group of affected facilities is in compliance with the applicable emissions standards provided that the owner or operator meets all of the conditions specified in paragraphs (e)(1) through (3) of this section.

(1) PM emissions from the most recent performance test for each individual affected facility are 90 percent or less of the applicable PM standard;

(2) The manufacturer's recommended maintenance procedures are followed for each control device; and

(3) A performance test is conducted on each affected facility at least once every 5 calendar years.

(f) As an alternative to meeting the requirements in paragraph (b)(2) of this section, an owner or operator of an affected facility that commenced construction, reconstruction, or modification after April 28, 2008, may elect to comply with the requirements in paragraph (f)(1) or (f)(2) of this section.

(1) Monitor visible emissions from each affected facility according to the requirements in paragraphs (f)(1)(i) through (iii) of this section.

(i) Conduct one daily 15-second observation each operating day for each affected facility (during normal operation) when the coal preparation and processing plant is in operation. Each observation must be recorded as either visible emissions observed or no visible emissions observed. Each observer determining the presence of visible emissions must meet the training requirements specified in §2.3 of Method 22 of appendix A–7 of this part. If visible emissions are observed during any 15-second observation, the owner or operator must adjust the operation of the affected facility and demonstrate within 24 hours that no visible emissions are observed from the affected facility. If visible emissions are observed, a Method 9, of appendix A–4 of this part, performance test must be conducted within 45 operating days.

(ii) Conduct monthly visual observations of all process and control equipment. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible.

(iii) Conduct a performance test using Method 9 of appendix A–4 of this part at least once every 5 calendar years for each affected facility.

(2) Prepare a written site-specific monitoring plan for a digital opacity compliance system for approval by the Administrator or delegated authority. The plan shall require observations of at least one digital image every 15 seconds for 10-minute periods (during normal operation) every operating day. An approvable monitoring plan must include a demonstration that the occurrences of visible emissions are not in excess of 5 percent of the observation period. For reference purposes in preparing the monitoring plan, *see* OAQPS “Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems.” This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Group (D243–02), Research

Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods. The monitoring plan approved by the Administrator or delegated authority shall be implemented by the owner or operator.

(g) As an alternative to meeting the requirements in paragraph (b)(2) of this section, an owner or operator of an affected facility that commenced construction, reconstruction, or modification after April 28, 2008, subject to a visible emissions standard under this subpart may install, operate, and maintain a continuous opacity monitoring system (COMS). Each COMS used to comply with provisions of this subpart must be installed, calibrated, maintained, and continuously operated according to the requirements in paragraphs (g)(1) and (2) of this section.

(1) The COMS must meet Performance Specification 1 in 40 CFR part 60, appendix B.

(2) The COMS must comply with the quality assurance requirements in paragraphs (g)(2)(i) through (v) of this section.

(i) The owner or operator must automatically (intrinsic to the opacity monitor) check the zero and upscale (span) calibration drifts at least once daily. For particular COMS, the acceptable range of zero and upscale calibration materials is as defined in the applicable version of Performance Specification 1 in 40 CFR part 60, appendix B.

(ii) The owner or operator must adjust the zero and span whenever the 24-hour zero drift or 24-hour span drift exceeds 4 percent opacity. The COMS must allow for the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified. The optical surfaces exposed to the effluent gases must be cleaned prior to performing the zero and span drift adjustments, except for systems using automatic zero adjustments. For systems using automatic zero adjustments, the optical surfaces must be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

(iii) The owner or operator must apply a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. All procedures applied must provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photodetector assembly.

(iv) Except during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments, the COMS must be in continuous operation and must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(v) The owner or operator must reduce all data from the COMS to 6-minute averages. Six-minute opacity averages must be calculated from 36 or more data points equally spaced over each 6-minute period. Data recorded during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments must not be included in the data averages. An arithmetic or integrated average of all data may be used.

(h) The owner or operator of each affected coal truck dump operation that commenced construction, reconstruction, or modification after April 28, 2008, must meet the requirements specified in paragraphs (h)(1) through (3) of this section.

(1) Conduct an initial performance test using Method 9 of appendix A–4 of this part according to the requirements in paragraphs (h)(1)(i) and(ii).

(i) Opacity readings shall be taken during the duration of three separate truck dump events. Each truck dump event commences when the truck bed begins to elevate and concludes when the truck bed returns to a horizontal position.

(ii) Compliance with the applicable opacity limit is determined by averaging all 15-second opacity readings made during the duration of three separate truck dump events.

(2) Conduct monthly visual observations of all process and control equipment. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible.

(3) Conduct a performance test using Method 9 of appendix A–4 of this part at least once every 5 calendar years for each affected facility.

§ 60.256 Continuous monitoring requirements.

(a) The owner or operator of each affected facility constructed, reconstructed, or modified on or before April 28, 2008, must meet the monitoring requirements specified in paragraphs (a)(1) and (2) of this section, as applicable to the affected facility.

(1) The owner or operator of any thermal dryer shall install, calibrate, maintain, and continuously operate monitoring devices as follows:

(i) A monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within ±1.7 °C (±3 °F).

(ii) For affected facilities that use wet scrubber emission control equipment:

(A) A monitoring device for the continuous measurement of the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±1 inch water gauge.

(B) A monitoring device for the continuous measurement of the water supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±5 percent of design water supply pressure. The pressure sensor or tap must be located close to the water discharge point. The Administrator shall have discretion to grant requests for approval of alternative monitoring locations.

(2) All monitoring devices under paragraph (a) of this section are to be recalibrated annually in accordance with procedures under §60.13(b).

(b) The owner or operator of each affected facility constructed, reconstructed, or modified after April 28, 2008, that has one or more mechanical vents must install, calibrate, maintain, and continuously operate the monitoring devices specified in paragraphs (b)(1) through (3) of this section, as applicable to the mechanical vent and any control device installed on the vent.

(1) For mechanical vents with fabric filters (baghouses) with design controlled potential PM emissions rates of 25 Mg (28 tons) per year or more, a bag leak detection system according to the requirements in paragraph (c) of this section.

(2) For mechanical vents with wet scrubbers, monitoring devices according to the requirements in paragraphs (b)(2)(i) through (iv) of this section.

(i) A monitoring device for the continuous measurement of the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±1 inch water gauge.

(ii) A monitoring device for the continuous measurement of the water supply flow rate to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±5 percent of design water supply flow rate.

(iii) A monitoring device for the continuous measurement of the pH of the wet scrubber liquid. The monitoring device is to be certified by the manufacturer to be accurate within ±5 percent of design pH.

(iv) An average value for each monitoring parameter must be determined during each performance test. Each monitoring parameter must then be maintained within 10 percent of the value established during the most recent performance test on an operating day average basis.

(3) For mechanical vents with control equipment other than wet scrubbers, a monitoring device for the continuous measurement of the reagent injection flow rate to the control equipment, as applicable. The monitoring device is to be certified by the manufacturer to be accurate within ±5 percent of design injection flow rate. An average reagent injection flow rate value must be determined during each performance test. The reagent injection flow rate must then be maintained within 10 percent of the value established during the most recent performance test on an operating day average basis.

(c) Each bag leak detection system used to comply with provisions of this subpart must be installed, calibrated, maintained, and continuously operated according to the requirements in paragraphs (c)(1) through (3) of this section.

(1) The bag leak detection system must meet the specifications and requirements in paragraphs (c)(1)(i) through (viii) of this section.

(i) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per dry standard cubic meter (mg/dscm) (0.00044 grains per actual cubic foot (gr/acf)) or less.

(ii) The bag leak detection system sensor must provide output of relative PM loadings. The owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (*e.g.,* using a strip chart recorder or a data logger).

(iii) The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph (c)(1)(iv) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(iv) In the initial adjustment of the bag leak detection system, the owner or operator must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.

(v) Following initial adjustment, the owner or operator must not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided in paragraph (c)(2)(vi) of this section.

(vi) Once per quarter, the owner or operator may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required by paragraph (c)(2) of this section.

(vii) The owner or operator must install the bag leak detection sensor downstream of the fabric filter.

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

(2) The owner or operator must develop and submit to the Administrator or delegated authority for approval a site-specific monitoring plan for each bag leak detection system. This plan must be submitted to the Administrator or delegated authority 30 days prior to startup of the affected facility. The owner or operator must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in paragraphs (c)(2)(i) through (vi) of this section.

(i) Installation of the bag leak detection system;

(ii) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established;

(iii) Operation of the bag leak detection system, including quality assurance procedures;

(iv) How the bag leak detection system will be maintained, including a routine maintenance schedule and spare parts inventory list;

(v) How the bag leak detection system output will be recorded and stored; and

(vi) Corrective action procedures as specified in paragraph (c)(3) of this section. In approving the site-specific monitoring plan, the Administrator or delegated authority may allow the owner and operator more than 3 hours to alleviate a specific condition that causes an alarm if the owner or operator identifies in the monitoring plan this specific condition as one that could lead to an alarm, adequately explains why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and demonstrates that the requested time will ensure alleviation of this condition as expeditiously as practicable.

(3) For each bag leak detection system, the owner or operator must initiate procedures to determine the cause of every alarm within 1 hour of the alarm. Except as provided in paragraph (c)(2)(vi) of this section, the owner or operator must alleviate the cause of the alarm within 3 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:

(i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions;

(ii) Sealing off defective bags or filter media;

(iii) Replacing defective bags or filter media or otherwise repairing the control device;

(iv) Sealing off a defective fabric filter compartment;

(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or

(vi) Shutting down the process producing the PM emissions.

§ 60.257 Test methods and procedures.

(a) The owner or operator must determine compliance with the applicable opacity standards as specified in paragraphs (a)(1) through (3) of this section.

(1) Method 9 of appendix A–4 of this part and the procedures in §60.11 must be used to determine opacity, with the exceptions specified in paragraphs (a)(1)(i) and (ii).

(i) The duration of the Method 9 of appendix A–4 of this part performance test shall be 1 hour (ten 6-minute averages).

(ii) If, during the initial 30 minutes of the observation of a Method 9 of appendix A–4 of this part performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes.

(2) To determine opacity for fugitive coal dust emissions sources, the additional requirements specified in paragraphs (a)(2)(i) through (iii) must be used.

(i) The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back.

(ii) The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction.

(iii) The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission.

(3) A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified in paragraphs (a)(3)(i) through (iii) of this section are met.

(i) No more than three emissions points may be read concurrently.

(ii) All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.

(iii) If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point.

(b) The owner or operator must conduct all performance tests required by §60.8 to demonstrate compliance with the applicable emissions standards specified in §60.252 according to the requirements in §60.8 using the applicable test methods and procedures in paragraphs (b)(1) through (8) of this section.

(1) Method 1 or 1A of appendix A–4 of this part shall be used to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

(2) Method 2, 2A, 2C, 2D, 2F, or 2G of appendix A–4 of this part shall be used to determine the volumetric flow rate of the stack gas.

(3) Method 3, 3A, or 3B of appendix A–4 of this part shall be used to determine the dry molecular weight of the stack gas. The owner or operator may use ANSI/ASME PTC 19.10–1981, "Flue and Exhaust Gas Analyses (incorporated by reference— *see* §60.17) as an alternative to Method 3B of appendix A–2 of this part.

(4) Method 4 of appendix A–4 of this part shall be used to determine the moisture content of the stack gas.

(5) Method 5, 5B or 5D of appendix A–4 of this part or Method 17 of appendix A–7 of this part shall be used to determine the PM concentration as follows:

(i) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). Sampling shall begin no less than 30 minutes after startup and shall terminate before shutdown procedures begin. A minimum of three valid test runs are needed to comprise a PM performance test.

(ii) Method 5 of appendix A of this part shall be used only to test emissions from affected facilities without wet flue gas desulfurization (FGD) systems.

(iii) Method 5B of appendix A of this part is to be used only after wet FGD systems.

(iv) Method 5D of appendix A–4 of this part shall be used for positive pressure fabric filters and other similar applications (*e.g.,* stub stacks and roof vents).

(v) Method 17 of appendix A–6 of this part may be used at facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of sections 8.1 and 11.1 of Method 5B of appendix A–3 of this part may be used in Method 17 of appendix A–6 of this part only if it is used after a wet FGD system. Do not use Method 17 of appendix A–6 of this part after wet FGD systems if the effluent is saturated or laden with water droplets.

(6) Method 6, 6A, or 6C of appendix A–4 of this part shall be used to determine the SO_2concentration. A minimum of three valid test runs are needed to comprise an SO_2performance test.

(7) Method 7 or 7E of appendix A–4 of this part shall be used to determine the NO_Xconcentration. A minimum of three valid test runs are needed to comprise an NO_Xperformance test.

(8) Method 10 of appendix A–4 of this part shall be used to determine the CO concentration. A minimum of three valid test runs are needed to comprise a CO performance test. CO performance tests are conducted concurrently (or within a 60-minute period) with NO_Xperformance tests.

§ 60.258 Reporting and recordkeeping.

(a) The owner or operator of a coal preparation and processing plant that commenced construction, reconstruction, or modification after April 28, 2008, shall maintain in a logbook (written or electronic) on-site and make it available upon request. The logbook shall record the following:

(1) The manufacturer's recommended maintenance procedures and the date and time of any maintenance and inspection activities and the results of those activities. Any variance from manufacturer recommendation, if any, shall be noted.

(2) The date and time of periodic coal preparation and processing plant visual observations, noting those sources with visible emissions along with corrective actions taken to reduce visible emissions. Results from the actions shall be noted.

(3) The amount and type of coal processed each calendar month.

(4) The amount of chemical stabilizer or water purchased for use in the coal preparation and processing plant.

(5) Monthly certification that the dust suppressant systems were operational when any coal was processed and that manufacturer's recommendations were followed for all control systems. Any variance from the manufacturer's recommendations, if any, shall be noted.

(6) Monthly certification that the fugitive coal dust emissions control plan was implemented as described. Any variance from the plan, if any, shall be noted. A copy of the applicable fugitive coal dust emissions control plan and any letters from the Administrator providing approval of any alternative control measures shall be maintained with the logbook. Any actions, *e.g.* objections, to the plan and any actions relative to the alternative control measures, *e.g.* approvals, shall be noted in the logbook as well.

(7) For each bag leak detection system, the owner or operator must keep the records specified in paragraphs (a)(7)(i) through (iii) of this section.

(i) Records of the bag leak detection system output;

(ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection settings; and

(iii) The date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and whether the cause of the alarm was alleviated within 3 hours of the alarm.

(8) A copy of any applicable monitoring plan for a digital opacity compliance system and monthly certification that the plan was implemented as described. Any variance from plan, if any, shall be noted.

(9) During a performance test of a wet scrubber, and each operating day thereafter, the owner or operator shall record the measurements of the scrubber pressure loss, water supply flow rate, and pH of the wet scrubber liquid.

(10) During a performance test of control equipment other than a wet scrubber, and each operating day thereafter, the owner or operator shall record the measurements of the reagent injection flow rate, as applicable.

(b) For the purpose of reports required under section 60.7(c), any owner operator subject to the provisions of this subpart also shall report semiannually periods of excess emissions as follow:

(1) The owner or operator of an affected facility with a wet scrubber shall submit semiannual reports to the Administrator or delegated authority of occurrences when the measurements of the scrubber pressure loss, water supply flow rate, or pH of the wet scrubber liquid vary by more than 10 percent from the average determined during the most recent performance test.

(2) The owner or operator of an affected facility with control equipment other than a wet scrubber shall submit semiannual reports to the Administrator or delegated authority of occurrences when the measurements of the reagent injection flow rate, as applicable, vary by more than 10 percent from the average determined during the most recent performance test.

(3) All 6-minute average opacities that exceed the applicable standard.

(c) The owner or operator of an affected facility shall submit the results of initial performance tests to the Administrator or delegated authority, consistent with the provisions of section 60.8. The owner or operator who elects to comply with the reduced performance testing provisions of sections 60.255(c) or (d) shall include in the performance test report identification of each affected facility that will be subject to the reduced testing. The owner or operator electing to comply with section 60.255(d) shall also include information which demonstrates that the control devices are identical.

(d) After July 1, 2011, within 60 days after the date of completing each performance evaluation conducted to demonstrate compliance with this subpart, the owner or operator of the affected facility must submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at *http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main.* For performance tests that cannot be entered into WebFIRE (*i.e.,* Method 9 of appendix A–4 of this part opacity performance tests) the owner or operator of the affected facility must mail a summary copy to United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243–01; RTP, NC 27711.

ATTACHMENT C

Source Description and Location

Source Name: Northern Indiana Public Service Company - Michigan City Generating Station
Source Location: 101 Wabash Street, Michigan City, IN 46360
County: LaPorte

Pursuant to Section F.1 of this permit, the follow paragraphs and tables of the Decree are incorporated by reference into this permit to the extent they relate to the Michigan City Generating Station.

Decree Paragraphs and Tables

DEFINITIONS:

All definitions contained with paragraphs 7 through 59 of the Decree, to the extent such terms are used in any of the paragraphs of the Decree listed in this Attachment A.

¶ NOx EMISSION REDUCTIONS AND CONTROLS:

¶¶ 60, 61, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73 and 74.
Tables 1, 2, 3 and 4.

SO2 EMISSION REDUCTIONS AND CONTROLS:

¶ 76, 77, 81, 82, 83, 84, 85, 86, 87, 88 and 89.
Tables 5 and 6.

PM EMISSION REDUCTIONS AND CONTROLS:

¶¶ 91, 92, 93 and 94.
Table 7.

UNIT RETIREMENT:

¶ 96

PM and MERCURY CEMS:

¶¶ 101, 102, 103, and 106.

PERIODIC REPORTING:

¶¶ 126 and 127(a).

FORCE MAJEURE:

¶¶ 144, 145, 146, 147, 148, 149, 150, 151 and 152.

NOTICE:

¶¶ 178, 179 and 180.

COMPLIANCE DETERMINATION:

¶¶ 196, 200 and 202.

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF INDIANA

UNITED STATES OF AMERICA,	)	
and	)	
THE STATE OF INDIANA,	)	
Plaintiffs	)	
v.	)	**Civil Action No. ____________**
NORTHERN INDIANA PUBLIC SERVICE CO.,	)	
Defendant.	)	

<u>CONSENT DECREE</u>

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WHEREAS, Plaintiff, the United States of America ("the United States"), on behalf of the United States Environmental Protection Agency ("EPA"), and Plaintiff, the State of Indiana, are filing with this Consent Decree a Complaint for injunctive relief and civil penalties pursuant to Sections 113(b)(2) and 167 of the Clean Air Act ("the Act"), 42 U.S.C. §§ 7413(b)(2) and 7477, and 326 Indiana Administrative Code sections 2-2 and 2-7, alleging that Defendant, Northern Indiana Public Service Co. ("NIPSCO"), has undertaken construction projects at major emitting facilities in violation of the Prevention of Significant Deterioration ("PSD") provisions of Part C of Subchapter I of the Act, 42 U.S.C. §§ 7470-7492, in violation of Nonattainment New Source Review requirements, 42 U.S.C.§§ 7501-7515, in violation of the requirements of Title V of the Act, 42 U.S.C. §§ 7661-7661f and in violation of the federally enforceable Indiana State Implementation Plan ("SIP");

WHEREAS, EPA issued a Notice of Violation (the "NOV") to NIPSCO on September 29, 2004, pursuant to Section 113(a) of the Act, 42 U.S.C. § 7413(a), alleging violations at the Michigan City, Rollin M. Schahfer, and Bailly Generating Stations of:

(a) the PSD provisions in Part C of Subchapter I of the Act, 42 U.S.C. §§ 7470-92,

(b) the Nonattainment New Source Review requirements in Part D of Subchapter I of the Act, 42 U.S.C. §§ 7501-7515,

(c) Subchapter V of the Act, 42 U.S.C. §§ 7661-7661f, and

(d) the federally enforceable Indiana SIP, including provisions implementing 40 C.F.R. § 52.21, and approved by EPA;

WHEREAS, EPA provided NIPSCO and the State of Indiana actual notice of the alleged violations and commencement of the action, in accordance with Section 113 of the Act, 42 U.S.C. § 7413;

WHEREAS, NIPSCO has been the owner and operator of the Michigan City, Rollin M. Schahfer, and Bailly Generating Stations from 1985 to the present;

WHEREAS, in the Complaint, Plaintiffs United States and the State of Indiana (collectively "Plaintiffs") allege, inter alia, that NIPSCO modified units and failed to obtain the necessary permits and install the controls necessary under the Act to reduce sulfur dioxide, nitrogen oxides, and/or particulate matter emissions, and that such emissions can damage human health and the environment;

WHEREAS, Plaintiffs' Complaint states claims upon which, if proven, relief can be granted against NIPSCO under Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477, and 28 U.S.C. § 1355;

WHEREAS, NIPSCO has denied and continues to deny the violations alleged in the Complaint and the NOV, and maintains that it has been and remains in compliance with the Act, federal implementing regulations and Indiana air regulations and statutes, including the Indiana SIP, and that it is not liable for civil penalties, injunctive or other relief;

WHEREAS, the Plaintiffs and the Defendant (collectively "the Parties," and each, individually, a Party) anticipate that the installation and operation of pollution control equipment pursuant to this Consent Decree will achieve significant reductions of sulfur dioxide ("SO_2"), nitrogen oxides ("NO_x"), and particulate matter ("PM") emissions and improve air quality; and

WHEREAS, the Parties have agreed, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated in good faith and at arms' length; that this settlement is fair, reasonable, in the best interest of the Parties and the public, and is consistent with the goals of the Act and the Indiana SIP; and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this matter;

WHEREAS, the Defendant has asserted that its Bailly Generating Station Units 7 and 8, Michigan City Generating Station Unit 12, and Schahfer Generating Station Unit 14, are cyclone-fired units, with cycling demand for electric generation and inherently high NOx baseline emissions, equipped with SCR (as hereinafter defined) systems with ammonia on demand ("AOD") systems.

NOW, THEREFORE, without any admission by the Defendant, and without adjudication of or admission with respect to the violations alleged in the Complaint or the NOV, it is hereby ORDERED, ADJUDGED, AND DECREED as follows:

I. JURISDICTION AND VENUE

1) This Court has jurisdiction over this action, the subject matter herein, and the Parties consenting hereto, pursuant to 28 U.S.C. §§ 1331, 1345, 1355, and 1367, and Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477. Venue is proper under Section 113(b) of the Act, 42 U.S.C. § 7413(b), and under 28 U.S.C. §§ 1391(b) and (c).

2) Solely for the purposes of this Consent Decree and the underlying Complaint, Defendant waives all objections and defenses that it may have to the Court's jurisdiction over Defendant and to venue in this District. Defendant shall not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree and agrees that the Complaint states claims upon which, if such claims were proven, relief may be granted pursuant to Section 113 of the Act, 42 U.S.C. § 7413(b).

3) Solely for purposes of the Complaint filed by Plaintiffs in this matter and this Consent Decree, for purposes of entry and enforcement of this Consent Decree, Defendant waives any defense or objection based on standing. Except as expressly provided for herein, this Consent Decree shall not create any rights in any party other than

Plaintiffs and Defendant. Except as provided in Section XXVIII (Public Comment) of this Consent Decree, the Parties consent to entry of this Consent Decree without further notice.

4) Notwithstanding the foregoing, should this Consent Decree not be entered by this Court, then the waivers and consents set forth in this Section I (Jurisdiction and Venue) shall be null and void and of no effect.

II. APPLICABILITY

5) Upon entry, the provisions of this Consent Decree shall apply to and be binding upon the Plaintiffs, the United States, including EPA, and the State of Indiana, including the Indiana Department of Environmental Management, and upon NIPSCO, its successors and assigns, and its officers, employees and agents, solely in their capacities as such.

6) NIPSCO shall be responsible for providing a copy of this Consent Decree to all vendors, suppliers, consultants, contractors, agents, and any other companies or organizations retained after entry of this Consent Decree to perform any of the work required by this Consent Decree. Notwithstanding any retention of contractors, subcontractors, or agents to perform any work required under this Consent Decree, NIPSCO shall be responsible for ensuring that all work is performed in accordance with the requirements of this Consent Decree. In any action to enforce this Consent Decree, NIPSCO shall not assert as a defense the failure of its officers, directors, employees, servants, agents, or contractors to take actions necessary to comply with this Consent Decree, unless NIPSCO establishes that such failure resulted from a Force Majeure Event, as defined in Section XVI (Force Majeure) of this Consent Decree.

III. DEFINITIONS

7) A “365-Day Rolling Average Emission Rate” for a Cyclone-fired Unit, other than the Bailly Units, shall be expressed as lb/mmBTU and calculated in accordance with the following procedure: first, sum the total pounds of NOx emitted from the Cyclone-fired Unit during an Operating Day and the previous three hundred and sixty-four (364) Operating Days, with such emissions being determined from data derived from CEMS installed and operated at the Unit; second, sum the total heat input to the Cyclone-fired Unit in mmBTU during the Operating Day and the previous three hundred and sixty-four (364) Operating Days; and third, divide the total number of pounds of NOx emitted during those three hundred and sixty-five (365) Operating Days by the total heat input during those three hundred and sixty-five (365) Operating Days. For Bailly Units 7 and 8, which share common stacks, the “365-Day Rolling Average Emission Rate” shall be expressed as lb/mmBTU and calculated in accordance with the procedure enumerated above in this Paragraph for other Cyclone-fired Units, except that the total pounds of NOx emitted and the total heat input used to calculate the 365-Day Rolling Average Emission Rate shall be calculated by using the combined total pounds of NOx emitted from Bailly Units 7 and 8 and the combined total heat input to Bailly Units 7 and 8. A new 365-Day Rolling Average Emission Rate shall be calculated for each new Operating Day. When a 365-Day Rolling Average Emission Rate includes Operating Days to which two different 365-Day Rolling Average Emission Rates apply, the less stringent 365-Day Rolling Average Emission Rate shall apply until such time as all Operating Days within the 365-day rolling average period fall within the more stringent specified 365-Day Rolling Average Emission Rate (e.g., if the specified 365-

Day Rolling Average Emission Rate for a Cyclone-fired Unit on December 31, 2009 is 0.140 lb/mmBTU and the specified 365-Day Rolling Average Emission Rate for that same Cyclone-fired Unit on December 31, 2010 becomes 0.120 lb/mmBTU, the less stringent December 31, 2009 specified rate would be the applicable 365-Day Rolling Average Emission Rate to determine on June 1, 2011 the Cyclone-fired Unit's compliance because the 365-Day Rolling Average Emission Rate determined on June 1, 2011 would include Operating Days prior to December 31, 2010). Each 365-Day Rolling Average Emission Rate shall include all emissions that occur during all periods of startup, shutdown and Malfunction within an Operating Day, except that emissions associated with a Malfunction that is determined to be a Force Majeure Event pursuant to Section XVI of this Consent Decree shall be excluded from the calculation of a 365-Day Rolling Average Emission Rate.

8) A "30-Day Rolling Average Emission Rate" for a Unit, other than the Bailly Units, shall be expressed as lb/mmBTU and calculated in accordance with the following procedure: first, sum the total pounds of the pollutant in question emitted from the Unit during an Operating Day and the previous twenty-nine (29) Operating Days, with such emissions being determined from data derived from CEMS installed and operated at the Unit; second, sum the total heat input to the Unit in mmBTU during the Operating Day and the previous twenty-nine (29) Operating Days; and third, divide the total number of pounds of the pollutant emitted during the thirty (30) Operating Days by the total heat input during the thirty (30) Operating Days. For Bailly Units 7 and 8, which share common stacks, the "30-Day Rolling Average Emission Rate" shall be expressed as lb/mmBTU and calculated in accordance with the procedure enumerated

above in this Paragraph for other Units, except that the total pounds of NOx emitted and the total heat input used to calculate the 30-Day Rolling Average Emission Rate shall be calculated by using the combined total pounds of NOx emitted from Bailly Units 7 and 8 and the combined total heat input to Bailly Units 7 and 8. A new 30-Day Rolling Average Emission Rate shall be calculated for each new Operating Day. When a 30-Day Rolling Average Emission Rate includes Operating Days that fall within two different specified 30-Day Rolling Average Emission Rates, the less stringent 30-Day Rolling Average Emission Rate shall apply until such time as all Operating Days within the 30-day rolling average period fall within the more stringent specified 30-Day Rolling Average Emission Rate (e.g., if the specified 30-Day Rolling Average Emission Rate for a Unit on December 1, 2010 is 0.170 lb/mmBTU and the specified 30-Day Rolling Average Emission Rate for that same Unit on January 1, 2011 becomes 0.150 lb/mmBTU, the less stringent December 1, 2010 specified rate would be the applicable 30-Day Rolling Average Emission Rate to determine on January 15, 2011 the Unit's compliance because the 30-Day Rolling Average Emission Rate determined on January 15, 2011 would include Operating Days prior to January 1, 2011). Each 30-Day Rolling Average Emission Rate shall include all emissions that occur during all periods of startup, shutdown and Malfunction within an Operating Day, except that emissions associated with a Malfunction that is determined to be a Force Majeure Event pursuant to Section XVI of this Consent Decree shall be excluded from the calculation of a 30-Day Rolling Average Emission Rate.

9) A "30-Day Rolling Average Removal Efficiency" means the percent reduction in the emissions of a pollutant achieved by a Unit's pollution control device

over a 30-Operating Day period. This percentage shall be calculated by subtracting the Unit's outlet 30-Day Rolling Average Emission Rate from the Unit's inlet 30-Day Rolling Average Emission Rate, with such rates being determined from data derived from CEMS installed and operated at the Unit, dividing the result by the 30-Day Rolling Average Emission Rate from the Unit's inlet and then multiplying that result by 100. A new 30-Day Rolling Average Removal Efficiency shall be calculated for each new Operating Day. 30-Day Rolling Average Emission Rates used in the calculation of 30-Day Rolling Average Removal Efficiencies pursuant to this Paragraph shall include all emissions that occur during all periods of startup, shutdown and Malfunction within an Operating Day, except that emissions associated with a Malfunction that is determined to be a Force Majeure Event pursuant to Section XVI of this Consent Decree shall be excluded from the calculation of a 30-Day Rolling Average Emission Rate.

10) "Annual System Tonnage Limitation" means the limitation on the number of tons of the pollutant in question that may be emitted from the NIPSCO System during the relevant calendar year (i.e., January 1 through December 31), and shall include all emissions of the pollutant emitted during periods of startup, shutdown and Malfunction.

11) "Boiler Island" means a Unit's: (a) fuel combustion system (including bunker, coal pulverizers, crusher, stoker, and fuel burners); (b) combustion air system; (c) steam generating system (i.e., firebox, boiler tubes and walls); and (d) draft system (excluding the stack), as further described in "Interpretation of Reconstruction," John B. Rasnick, U.S. EPA (November 25, 1986), and the attachments thereto.

12) "Calendar Month" means all of the Operating Days in one calendar month period.

13) "Capital Expenditures" means all capital expenditures, as defined by Generally Accepted Accounting Principles ("GAAP"), as those principles exist at the Date of Entry of this Consent Decree, excluding the cost of installing or upgrading pollution control devices.

14) "CEMS" and "Continuous Emission Monitoring System" mean, for obligations involving NO_X and SO_2 under this Consent Decree, the devices defined in 40 C.F.R.§ 72.2 and installed and maintained as required by 40 C.F.R. Part 75.

15) "Clean Air Act" and "the Act" mean the federal Clean Air Act, 42 U.S.C. §§ 7401-7671q, and its implementing regulations.

16) "Consent Decree" and "Decree" mean this Consent Decree, including Appendix A which is hereto incorporated into this Consent Decree.

17) "Continuous Operation" and "Continuously Operate" mean, for obligations involving NOx, PM, and SO_2 under this Consent Decree, the operation of any specified NOx, PM or SO_2 control technology equipment at all times that the Unit it serves is in operation, except during a Malfunction of the control technology equipment, consistent with technological limitations, manufacturers' specifications, and good air pollution control practices for minimizing emissions (as defined in 40 C.F.R. § 60.11(d)).

18) "Cyclone-fired Unit" means those Units in the NIPSCO System that operate cyclone-fired boilers for electric generation and have inherently high NOx baseline emissions. The following Units in the NIPSCO System are considered Cyclone-fired Units: Bailly Unit 7 and Unit 8, Michigan City Unit 12, and Schahfer Unit 14.

19) “Date of Entry” means the date this Consent Decree is signed or otherwise approved in writing by the District Court Judge for the United States District Court for the Northern District of Indiana.

20) “Date of Lodging” means the date this Consent Decree is filed for lodging with the Clerk of the Court for the United States District Court for the Northern District of Indiana.

21) “Defendant” means the Northern Indiana Public Service Co. (“NIPSCO”).

22) “Emission Rate” means the number of pounds of pollutant emitted per million British thermal units of heat input (“lb/mmBTU”), measured in accordance with this Consent Decree.

23) “EPA” means the United States Environmental Protection Agency.

24) “ESP” and “Electrostatic Precipitator” mean a device for removing particulate matter from combustion gases by imparting an electric charge to the particles and then attracting them to a metal plate or screen of opposite charge before the combustion gases are exhausted to the atmosphere.

25) “Flue Gas Desulfurization System” and “FGD” mean a pollution control device that employs flue gas desulfurization technology, including an absorber utilizing lime, fly ash, or limestone slurry, for the reduction of sulfur dioxide emissions.

26) “Fossil Fuel” means any hydrocarbon fuel, including coal, petroleum oil, and natural gas.

27) “Improved Unit” means, in the case of NO_X, a NIPSCO System Unit that has an SCR or is scheduled under this Consent Decree to be equipped with an SCR (or an equivalent NOx control technology approved pursuant to Paragraph 65) or in the case of

SO_2, a NIPSCO System Unit that has an FGD or is scheduled under this Consent Decree to be equipped with an FGD (or equivalent SO_2 control technology approved pursuant to Paragraph 80) in accordance with this Consent Decree. A Unit may be an Improved Unit for one pollutant without being an Improved Unit for the other. The following Units are, in accordance with the preceding sentences, Improved Units for purposes of this Consent Decree: Bailly Units 7 and 8 (NO_X and SO_2); Michigan City Unit 12 (NO_X and SO_2); Schahfer Unit 14 (NO_X and SO_2); Schahfer Unit 15 (SO_2) and Schahfer Units 17 and 18 (SO_2). Schahfer Unit 15 can become an Improved Unit for NOx, if NIPSCO elects NOx Option 1 as described in Table 1 and Paragraph 60 of this Consent Decree. Schahfer Unit 15 can also become an Improved Unit for NOx if NIPSCO elects NOx Option 2 as described in Table 1 and Paragraph 60 and Schahfer Unit 15 becomes, at NIPSCO's discretion, subject to a federally enforceable 0.080 lb/mmBTU NO_X 30-Day Rolling Average Emission Rate, for which the rate and the requirement to Continuously Operate such SNCR is incorporated into a site-specific amendment to the SIP and modification to the Title V permit. Schahfer Units 17 and 18 can become an Improved Unit for NOx if either Unit is equipped with an SCR (or equivalent NO_X control technology approved pursuant to Paragraph 65) and has become subject to a federally enforceable 0.080 lb/mmBTU NO_X 30-Day Rolling Average Emission Rate, which rate, and the requirement to Continuously Operate such SCR, is incorporated into a site-specific amendment to the SIP and modification to the Title V permit.

28) "Indiana SIP" means the Indiana state implementation plan approved and enforceable by EPA under Section 110 of the Act.

29) "lb/mmBTU" means one pound of a pollutant per million British thermal units of heat input.

30) "Low Sulfur Coal" means coal that will achieve an uncontrolled SO_2 emission rate of less than 1.00 lb/mmBTU.

31) "Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not Malfunctions.

32) "Monthly SO_2 Removal Efficiency" means the percent reduction in SO2 emissions achieved by the FGD at Bailly Units 7 and 8 during a Calendar Month. This percentage shall be calculated in accordance with the following procedure: (a) first, sum the total pounds of SO_2 emitted during a Calendar Month from the outlet at the Bailly main stack (CS001) and the Bailly bypass stack; (b) second, divide that sum by the sum of the total pounds of SO_2 during that same Calendar Month that enter the Bailly FGD (as measured at the inlet to the FGD) and are emitted from Bailly bypass stack; (c) third, subtract that result from 1.0 or 100 percent (*i.e.*, if the resulting number is 0.10, subtract 0.10 from 1.0); and, (d) fourth, multiply that result by 100. The pounds of SO_2 emitted from the Bailly main stack (CS001), inlet to the FGD, and bypass stack shall be determined from data derived from SO_2 CEMS installed and operated at Bailly. Emissions associated with a Malfunction that is determined to be a Force Majeure Event pursuant to Section XVI of this Consent Decree shall be excluded from the calculation of a Monthly SO_2 Removal Efficiency.

33) "MW" means a megawatt or one million watts.

34) “National Ambient Air Quality Standards” and “NAAQS” mean the national ambient air quality standards that are promulgated pursuant to Section 109 of the Act, 42 U.S.C. § 7409.

35) “NIPSCO” means Northern Indiana Public Service Co.

36) “NIPSCO System” means the following coal-fired, electric steam-generating Units owned by NIPSCO and located in the State of Indiana, with estimated net demonstrated generating capacities for such Units listed in parentheses below:

a. the Bailly Electric Generation Station (“Bailly”) in Porter County, IN, comprised of Unit 7 (160 MW) and Unit 8 (320 MW);

b. the Michigan City Generating Station (“Michigan City”) in LaPorte County, IN, comprised of Unit 12 (469 MW);

c. the Rollin M. Schahfer Electric Generating Station (“Schahfer”) in Jasper County, IN, comprised of Unit 14 (431 MW), Unit 15 (472 MW), Unit 17 (361 MW), and Unit 18 (361 MW); and

d. the Dean H. Mitchell Electric Generating Station (“Mitchell”) in Lake County, IN, comprised of Unit 4 (110 MW), Unit 5 (125 MW), Unit 6 (126 MW), and Unit 11 (125 MW).

37) “Nonattainment New Source Review” and “Nonattainment NSR” mean the nonattainment area New Source Review (“NSR”) program within the meaning of Part D of Subchapter I of the Act, 42 U.S.C. §§ 7501-7515, and 40 C.F.R. Part 51, as well as any Nonattainment NSR provisions of the Indiana SIP.

38) “NO_X” means oxides of nitrogen.

39) “NO_X Allowance” means an authorization or credit to emit a specified amount of NO_X that is allocated or issued under an emissions trading or marketable permit program of any kind that has been established under the Clean Air Act or the Indiana SIP.

40) “Over- Fired Air” and “OFA” mean an in-furnace staged combustion control to reduce NO_X emissions.

41) “Operating Day” means any calendar day during which a Unit fires Fossil Fuel.

42) “Other Unit” means any Unit within the NIPSCO System that is not an Improved Unit for the pollutant in question. A Unit may be an Improved Unit for NO_X and an Other Unit for SO_2, and vice versa.

43) “Ownership Interest” means part or all of NIPSCO’s legal or equitable ownership interest in the NIPSCO System Units.

44) “Parties” means the United States, including the EPA and the United States Department of Justice, the State of Indiana, including the Indiana Attorney General and the Indiana Department of Environmental Management, and NIPSCO.

45) “Plaintiff(s)” means the United States, including the EPA and the United States Department of Justice, and the State of Indiana, including the Indiana Attorney General and the Indiana Department of Environmental Management (“IDEM”).

46) “PM Control Device” means any device, including an ESP or a fullstream baghouse, that reduces emissions of particulate matter (“PM”).

47) “PM” means particulate matter.

48) “PM Continuous Emission Monitoring System” and “PM CEMS” mean the equipment that samples, analyzes, measures, and provides, by readings taken at frequent intervals, an electronic or paper record of PM emissions.

49) “PM Emission Rate” means the number of pounds of PM emitted per million BTU of heat input (“lb/mmBTU”).

50) “Project Dollars” means NIPSCO’s expenditures and payments incurred or made in carrying out the Environmental Mitigation Projects identified in Section X (Environmental Mitigation Projects) of this Consent Decree to the extent that such expenditures or payments both: (a) comply with the requirements set forth in Section X (Environmental Mitigation Projects) and Appendix A of this Consent Decree; and (b) constitute NIPSCO’s direct payments for such projects, NIPSCO’s external costs for contractors, vendors, and equipment, or NIPSCO’s internal costs consisting of employee time, travel, or out-of-pocket expenses specifically attributable to these particular projects and documented in accordance with GAAP.

51) “PSD” means Prevention of Significant Deterioration program within the meaning of Part C of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492 and 40 C.F.R. Part 52, as well as any PSD provisions of the Indiana SIP.

52) “Retire” or “Retirement” means to permanently cease to operate, physically render inoperable, and relinquish all Clean Air Act permits for a Unit within the NIPSCO System.

53) “Selective Catalytic Reduction System” and “SCR” mean a pollution control device that employs selective catalytic reduction technology for the reduction of NO_X emissions.

54) “Selective Non-Catalytic Reduction System” and “SNCR” mean a pollution control device that employs selective non-catalytic reduction technology for the reduction of NO_X emissions.

55) “SO_2” means sulfur dioxide.

56) “SO_2 Allowance” means “allowance” as defined at 42 U.S.C. § 7651a(3): “an authorization, allocated to an affected unit by the Administrator of EPA under Subchapter IV of the Act, to emit, during or after a specified calendar year, one ton of sulfur dioxide.”

57) “Surrender” means permanently surrendering NOx or SO_2 allowances so that such NOx or SO2 allowances can never be used to meet any compliance requirement under the Clean Air Act, the Indiana SIP, or this Consent Decree.

58) “Title V Permit” means the permit required for NIPSCO’s major sources under Subchapter V of the Act, 42 U.S.C. §§ 7661-7661f.

59) “Unit” means, collectively, the coal pulverizer, stationary equipment that feeds coal to the boiler, the boiler that produces steam for the steam turbine, the steam turbine, the generator, equipment necessary to operate the generator, steam turbine and boiler, and all ancillary equipment, including pollution control equipment, at or serving a coal-fired steam electric generating unit. An electric steam generating station may comprise one or more Units.

IV. <u>NO_X EMISSION REDUCTIONS AND CONTROLS</u>

A. <u>NO_X Emission Controls</u>

60) Commencing for each Unit on the dates set forth in Table 1 below, NIPSCO shall Continuously Operate the NOx control technology at each Unit in the

NIPSCO System as stated in Table 1 and achieve and continuously maintain the 30-Day Rolling Average Emission Rates for NOx set forth in Table 1.

Table 1

Unit	Control Technology	30-Day Rolling Average Emission Rate (lb/mmBTU)	Date required to meet 30-Day Rolling Average Emission Rate
Bailly Units 7 and 8	Bailly Unit 7 SCR; Bailly Unit 8 SCR	0.180	March 31, 2011
Michigan City Unit 12	SCR	0.160	March 31, 2011
	NOx Option A: SCR NOx Option B: Retire	NOx Option A: 0.160 NOx Option B: N/A	December 31, 2018
Schahfer Unit 14	SCR	0.160	March 31, 2011
Schahfer Unit 15	LNB/OFA	0.180	January 31, 2011
	NOx Option 1: SCR NOx Option 2: SNCR	NOx Option 1: 0.080 NOx Option 2: 0.150	NOx Option 1: December 31, 2015 NOx Option 2: December 31, 2012
Schahfer Unit 17	LNB/OFA	0.200	March 31, 2011
Schahfer Unit 18	LNB/OFA	0.200	March 31, 2011

61) By December 31, 2014, NIPSCO shall notify EPA of its decision to implement either NOx Option A or NOx Option B for Michigan City Unit 12 as described in Table 1.

62) By December 31, 2011, NIPSCO shall notify EPA of its decision to implement either NOx Option 1 or NOx Option 2 for Schahfer Unit 15 as described in Table 1.

63) Commencing for each Cyclone-fired Unit on the dates set forth in Table 2 below, NIPSCO shall Continuously Operate the NOx control technology at each Cyclone-fired Unit in the NIPSCO System as stated in Table 2 and achieve and continuously maintain the 365-Day Rolling Average Emission Rates for NOx set forth in Table 2.

Table 2

Unit	Control Technology	365-Day Rolling Average Emission Rate (lb/mmBTU)	Date required to meet 365-Day Rolling Average Emission Rate
Bailly Units 7 and 8	Bailly Unit 7 SCR; Bailly Unit 8 SCR	0.150	December 31, 2010
		0.130	December 31, 2013
		0.120	December 31, 2015
Michigan City Unit 12	SCR	0.140	December 31, 2010
		0.120	December 31, 2011
		0.100	December 31, 2013
Schahfer Unit 14	SCR	0.140	December 31, 2010
		0.120	December 31, 2012
		0.100	December 31, 2014

64) Beginning forty five (45) days from the Date of Entry of this Consent Decree, NIPSCO shall Continuously Operate low NOx burners ("LNB") and/or OFA on the NIPSCO System Units according to Table 3 below.

Table 3

NIPSCO System Unit	**NOx Control Technology**
Bailly Unit 7	OFA
Bailly Unit 8	OFA
Michigan City Unit 12	OFA
Schahfer Unit 14	OFA
Schahfer Unit 15	LNB/OFA
Schahfer Unit 17	LNB/OFA

Schahfer Unit 18	LNB/OFA

65) With prior written notice to the Plaintiffs and written approval from EPA (after consultation by EPA with the State of Indiana), NIPSCO may, in lieu of installing and operating SCR or SNCR technology at a Unit, install and operate at that Unit equivalent NOx control technology so long as such equivalent NOx control technology has been demonstrated to be capable of achieving and maintaining a 30-Day Rolling Average Rate for NOx of not more than 0.080 lb/mmBTU for that NIPSCO Unit. If NIPSCO elects to install and operate equivalent NOx control technology at a Unit, it must commence operation of the equivalent NOx control technology at that Unit by the date specified for SCR or SNCR installation in Table 1 or Table 2. Upon installation of such equivalent NOx control technology at a Unit as a means of complying with Table 1 or 2, NIPSCO shall Continuously Operate and achieve and maintain a 30-Day Rolling Average Emission Rate for NOx of not more than 0.080 lb/mmBTU at that Unit.

B. General NO_X Provision

66) In determining Emission Rates for NO_X, NIPSCO shall use CEMS in accordance with the procedures of 40 C.F.R. Part 75.

C. Annual System Tonnage Limitation for NO_X

67) In addition to meeting the emission limits set forth in Tables 1 and 2, all Units in the NIPSCO System, collectively, shall not emit NO_X in excess of the Annual System Tonnage Limitations calculated on a calendar-year basis set forth in Table 4.

Table 4:

Applicable Calendar Year	**Annual NIPSCO System Tonnage Limitation for NO_X**
2011	15,825 tons
2012	15,537 tons
2013	If NIPSCO selects NOx Option 1 in Table 1 (SCR on Schahfer Unit 15): 15,247 tons If NIPSCO selects NOx Option 2 in Table 1(SNCR on Schahfer Unit 15): 13,752 tons
2014	If NIPSCO selects NOx Option 1 in Table 1 (SCR on Schahfer Unit 15): 14,959 tons If NIPSCO selects NOx Option 2 in Table 1 (SNCR on Schahfer Unit 15): 13,464 tons
2015	If NIPSCO selects NOx Option 1 in Table 1 (SCR on Schahfer Unit 15): 14,365 tons If NIPSCO selects NOx Option 2 in Table 1 (SNCR on Schahfer Unit 15): 12,870
2016	If NIPSCO selects NOx Option 1 in Table 1 (SCR on Schahfer Unit 15): 11,704 tons If NIPSCO selects NOx Option 2 in Table 1 (SNCR on Schahfer Unit 15): 12,870
2017	Same as 2016

2018	Same as 2016
2019 and every year thereafter	If NIPSCO selects NOx Option 2 and NOx Option A in Table 1 (SNCR on Schahfer Unit 15 and SCR on Michigan City Unit 12): 12,870 tons If NIPSCO selects NOx Option 2 and NOx Option B in Table 1 (SNCR on Schahfer Unit 15 and Retirement of Michigan City Unit 12): 11,470 If NIPSCO selects NOx Option 1 and NOx Option A in Table 1 (SCR on Schahfer Unit 15 and SCR on Michigan City Unit 12): 11,704 tons If NIPSCO selects NOx Option 1 and NOx Option B in Table 1 (SCR on Schahfer Unit 15 and Retirement of Michigan City Unit 12): 10,300 tons

68) Except as may be necessary to comply with Section XV (Stipulated Penalties), NIPSCO may not use NO_X Allowances to comply with any requirement of this Consent Decree, including by claiming compliance with any emission limitation required by this Decree by using, tendering, or otherwise applying NO_X Allowances to offset any excess emissions (i.e., emissions above the limits specified in Table 1, Table 2 and Table 4).

D. Use and Surrender of NO_X Allowances

69) Except as provided in this Consent Decree, NIPSCO shall not sell or trade any NO_X Allowances allocated to the NIPSCO System that would otherwise be available

for sale or trade as a result of the actions taken by NIPSCO to comply with the requirements, as they become due, of this Consent Decree.

70) For any given calendar year, provided that NIPSCO is in compliance for that calendar year with all emissions limitations for NOx set forth in this Consent Decree, nothing in this Consent Decree, including the requirement to Surrender NOx allowances under Paragraph 71 of this Consent Decree, shall preclude NIPSCO from selling or trading NO_X Allowances allocated to the NIPSCO System that become available for sale or trade that calendar year solely as a result of:

a. the installation and operation at any time of any NOx pollution control technology or technique that is not otherwise required by this Consent Decree, or the installation and operation of NOx controls prior to the dates required under this Section IV of this Consent Decree; or

b. achievement and maintenance of a NO_X 30-Day Rolling Average Emission Rate at any non-cyclone NIPSCO System Unit, as determined on a unit by unit basis, below the emission rate specified for such Unit in Table 1; or for any NIPSCO Cyclone-fired Unit, as determined on a unit by unit basis, achievement and maintenance of a NOx 30-Day Rolling Average Emission Rate below 0.100 lb/mmBTU for such Cyclone-fired Unit, and a NOx 365-Day Rolling Average Emission Rate below the emission rate specified for such Cyclone-fired Unit in Table 2,

so long as NIPSCO timely reports the generation of such surplus NO_X Allowances that occur after the Date of Entry of this Consent Decree in accordance with Section XIII (Periodic Reporting) of this Consent Decree.

71) Beginning with calendar year 2011, and continuing each calendar year thereafter, NIPSCO shall Surrender to EPA, or transfer to a non-profit third party selected by NIPSCO for Surrender, all NOx Allowances allocated to the NIPSCO System Units for that calendar year that NIPSCO does not need in order to meet its own federal and/or state Clean Air Act statutory or regulatory requirements. This requirement to Surrender all such NOx Allowances allocated to NIPSCO for a given calendar year is subject to Paragraph 70 of this Consent Decree. NIPSCO shall make such Surrender annually, within forty-five (45) days of NIPSCO's receipt of the Annual Deduction Reports for NOx from EPA. Surrender need not include the specific NOx Allowances that were allocated to NIPSCO System Units, so long as NIPSCO Surrenders NOx Allowances that are from the same year or an earlier year and that are equal to the number required to be Surrendered under this Paragraph.

72) If any NOx allowances are transferred directly to a non-profit third party, NIPSCO shall include a description of such transfer in the next report submitted to EPA and the State of Indiana pursuant to Section XIII (Periodic Reporting) of this Consent Decree. Such report shall: (i) provide the identity of the non-profit third-party recipient(s) of the NOx Allowances and a listing of the serial numbers of the transferred NOx Allowances; and (ii) include a certification by the third-party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the allowances and will not use any of the NOx Allowances to meet any obligation imposed by any environmental law. No later than the third periodic report due after the transfer of any NOx Allowances, NIPSCO shall include a statement that the third-party recipient(s) Surrendered the NOx Allowances for permanent Surrender to EPA in accordance with the provisions of

Paragraph 71 within one (1) year after NIPSCO transferred the NOx Allowances to them. NIPSCO shall not have complied with the NOx Allowance Surrender requirements of this Paragraph until all third-party recipient(s) shall have actually Surrendered the transferred NOx Allowances to EPA.

73) For all NOx Allowances Surrendered to EPA, NIPSCO or the third-party recipient(s) (as the case may be) shall first submit a NOx Allowance transfer request form to the EPA Office of Air and Radiation's Clean Air Markets Division ("CAMD") directing the transfer of such NOx Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, NIPSCO or the third-party recipient(s) shall irrevocably authorize the transfer of these NOx Allowances and identify by name of account and any applicable serial or other identification numbers or station names the source and location of the NOx Allowances being Surrendered.

74) Nothing in this Consent Decree shall prevent NIPSCO from purchasing or otherwise obtaining NO_X Allowances from another source for purposes of complying with state or federal Clean Air Act requirements to the extent otherwise allowed by law. Such allowances will not be used to demonstrate compliance with the annual tonnage caps of this Consent Decree.

75) The requirements in Paragraphs 69 through 74 of this Consent Decree pertaining to NIPSCO's use or Surrender of NO_X Allowances are permanent injunctions not subject to any termination provision of this Consent Decree.

V. SO_2 EMISSION REDUCTIONS AND CONTROLS

A. SO_2 Emission Controls

76) Commencing for each Unit on the dates set forth in Table 5 below, NIPSCO shall Continuously Operate the FGDs at each Unit in the NIPSCO System as stated in Table 5 and achieve and continuously maintain the 30-Day Rolling Average Emission Rate or applicable SO_2 30-Day Rolling Average Removal Efficiency or Monthly SO_2 Removal Efficiency as set forth in Table 5.

Table 5

Unit	Control Technology	30-Day Rolling Average Emission Rate (lb/mmBTU) / Removal Efficiency & Monthly SO_2 Removal Efficiency	Date required to meet emission rate/removal efficiency
Bailly Units 7 and 8	Upgrade existing FGD on Bailly 7 and 8 main stack	95.0% Monthly SO_2 Removal Efficiency	January 1, 2011
		97.0% 30-Day Rolling Average SO2 Removal Efficiency or 95.0% 30-Day Rolling Average SO_2 Removal Efficiency if Bailly Units 7 and 8 burn only Low Sulfur Coal for that entire 30-day period	January 1, 2014
Michigan City Unit 12	SO_2 Option 1: Retire SO_2 Option 2: FGD	SO_2 Option 1: N/A SO_2 Option 2: 0.100 lb/mmbtu 30-Day Rolling Average Emission Rate	December 31, 2018
Schahfer Unit 14	FGD	0.080 lb/mmbtu 30-Day Rolling Average Emission Rate	December 31, 2013
Schahfer Unit 15	FGD	0.080 lb/mmbtu 30-Day Rolling Average Emission Rate	December 31, 2015
Schahfer Unit 17	Upgrade existing FGD	97.0 % 30-Day Rolling Average Removal Efficiency	January 31, 2011
Schahfer Unit 18	Upgrade	97.0 % 30-Day Rolling Average	January 31, 2011

	existing FGD	Removal Efficiency	

77) By December 31, 2014, NIPSCO shall notify EPA of its decision to implement either SO_2 Option 1 or SO_2 Option 2 for Michigan City Unit 12 as described in Table 5.

78) NIPSCO utilizes a main stack (CS00001) through which air emissions from both Bailly Units 7 and 8 are routed. NIPSCO has in place an existing contract with Pure Air, a separate entity, under which Pure Air owns and operates an FGD controlling SO2 emissions from Bailly Units 7 and 8. This FGD controls SO_2 emissions from both Bailly Units 7 and 8. During periods of startup, the FGD and the main stack cannot be used for the unit(s) experiencing startup. When either or both Bailly Units 7 and 8 are experiencing startup, emissions from the unit(s) experiencing startup are routed through a bypass stack that serves Bailly Unit 7 and Unit 8 around the FGD and these emissions are not controlled by the FGD. While combusting fuel, emissions from a Bailly unit shall be routed through the FGD unless that unit is experiencing startup. The following restrictions shall apply to NIPSCO's use of the bypass stack:

a. While combusting fuel, NIPSCO shall not use the Bailly Unit 7 and Unit 8 bypass stack for any emission purpose other than during periods of startup, and then may only use it for the unit(s) experiencing startup.

b. All SO_2 emissions associated with periods of startup are included in the calculation of the Monthly SO_2 Removal Efficiency and 30-Day Rolling Average SO_2 Removal Efficiency for Bailly Unit 7 and 8 as described in Table 5, except that NIPSCO may exclude from that calculation those startup emissions from a unit that occur up until that unit reaches a temperature of 280 degrees Fahrenheit as measured at the outlet of the precipitator, not to exceed 16 hours in duration per startup while combusting coal. NIPSCO may however, exclude from the relevant removal efficiency, startup emissions that occur after the 16th hour up to the 24th hour, if NIPSCO Surrenders SO_2 Allowances in an amount equal to the difference between the actual tons of SO_2 emitted from the bypass stack between hour 17 and the point in time NIPSCO ceases use of the bypass stack for startup emissions (but, in any event, no longer than hour 24) and the tons of SO_2 emissions that would have been emitted assuming compliance with the relevant removal efficiency for Bailly Unit 7 and 8 specified in Table 5. In addition, NIPSCO may only exclude these limited unit startup emissions for the Bailly bypass stack if NIPSCO demonstrates to EPA that such emissions otherwise would cause NIPSCO to violate the relevant removal efficiency for Bailly Unit 7 or 8 as described in Table 5. Such demonstration shall require that NIPSCO, at minimum, provide EPA with calculations of emissions with and without bypass stack emissions;

c. NIPSCO shall limit the use of the bypass stack to the greatest extent practicable;

d. NIPSCO shall operate the bypass stack consistent with good engineering and maintenance practices for minimizing emissions to the extent practicable; and

e. Annual System Tonnage Limitations in Tables 4 and 6 shall apply during all periods of emissions, including all periods of bypass stack emissions.

79) In the event that the Monthly SO2 Removal Efficiency requirements for Bailly Unit 7 and Unit 8 as listed in Table 5 are not achieved for any given Calendar Month prior to January 1, 2014 after applying Paragraph 78, as applicable, NIPSCO may nonetheless remain in compliance with the requirements of this Section V (SO_2 Emissions Reduction and Controls) by Surrendering the number of SO2 Allowances equal to two times (2x) the difference between the actual tons of SO2 emitted from the Bailly main stack (CS001) during such Calendar Month minus the tons of SO2 emissions that would have been emitted from that stack during that Calendar Month had NIPSCO complied with the applicable Monthly SO2 Removal Efficiency specified in Table 5. In all cases where the applicable Monthly SO_2 Removal Efficiency is not achieved for a given Calendar Month prior to January 1, 2014, the difference between the actual SO_2 emissions emitted and the compliance level of SO_2 emissions during such Calendar Month shall be rounded up to the next highest ton (e.g., if the difference is 750 pounds, then the difference shall be rounded up to one ton and SO_2 Allowances equal to two tons would be required to be retired). Any allowances retired under this Paragraph 79 shall be in addition to any allowances that NIPSCO is otherwise required to Surrender to EPA or transfer to a non-profit third party pursuant to Paragraph 86 and 87 of this Consent Decree. After January 1, 2014, the method described in this Paragraph 79 may not be used to comply with the requirements of this Section.

80) After prior written notice to the Plaintiffs and prior written approval from EPA (after consultation by EPA with the State of Indiana), NIPSCO may, in lieu of

installing and operating FGD technology at Schahfer Unit 15, install and operate equivalent SO_2 control technology, so long as such equivalent SO_2 control technology has been demonstrated to be capable of achieving and maintaining a 30-Day Rolling Average Rate for SO_2 of not more than 0.080 lb/mmBTU, and so long as NIPSCO commences operation of the equivalent SO_2 control technology by the date specified for FGD installation in Table 5. If it elects to request equivalent SO_2 technology, NIPSCO shall provide the written notice referenced above no later than December 31, 2012. Upon installation of such equivalent SO_2 control technology as a means of complying with Table 5, NIPSCO shall achieve and maintain a 30-Day Rolling Average Emission Rate for SO_2 of not more than 0.080 lb/mmBTU at that Unit.

B. General SO2 Provisions

81) In determining Emission Rates for SO_2, NIPSCO shall use CEMS in accordance with the procedures of 40 C.F.R. Part 75.

C. Annual System Tonnage Limitation for SO_2

82) In addition to meeting the emission limits set forth in Table 5, all Units in the NIPSCO System, collectively, shall not emit SO_2 in excess of the Annual System Tonnage Limitations calculated on a calendar-year basis set forth in Table 6.

Table 6:

Applicable Calendar Year	Annual NIPSCO System Tonnage Limitation for SO_2
2011	50,200 tons
2012	Same as 2011

2013	Same as 2011
2014	35,900 tons
2015	Same as 2014
2016	25,300 tons
2017	Same as 2016
2018	Same as 2016
2019 and thereafter	If NIPSCO selects SO_2 Option 2 (Michigan City Unit 12 FGD): 11,600 tons If NIPSCO selects SO_2 Option 1 (Retirement of Michigan City Unit 12): 10,200 tons

83) Except as may be necessary to comply with Section XV (Stipulated Penalties), and except as permitted or required under Paragraphs 78 and 79, NIPSCO may not use SO_2 Allowances to comply with any requirement of this Consent Decree, including by claiming compliance with any emission limitation required by this Decree by using, tendering, or otherwise applying SO_2 Allowances to offset any excess emissions (i.e., emissions above the limits specified in Table 5 and Table 6).

D. Use and Surrender of SO_2 Allowances

84) Except as provided in this Consent Decree, NIPSCO shall not sell or trade any SO_2 Allowances allocated to the NIPSCO System that would otherwise be available for sale or trade as a result of the actions taken by NIPSCO to comply with the requirements, as they become due, of this Consent Decree.

85) For any given calendar year, provided that the NIPSCO System is in compliance for that calendar year with all emissions limitations for SO_2 set forth in this Consent Decree, nothing in this Consent Decree, including the requirement to Surrender SO_2 Allowances under Paragraph 86 of this Consent Decree, shall preclude NIPSCO from selling or trading SO_2 Allowances allocated to the NIPSCO System that become available for sale or trade that calendar year solely as a result of:

a. the installation and operation of any pollution control technology or technique that is not otherwise required by this Consent Decree, or the installation and operation of any FGD prior to the dates required by Section V of this Consent Decree; or

b. achievement and maintenance of an SO_2 30-Day Rolling Average Removal Efficiency, 30-Day Rolling Average Emission Rate, or Monthly SO2 Removal Efficiency at any NIPSCO System Unit, as determined on a unit by unit basis, at a higher removal efficiency than the SO_2 30-Day Rolling Average Removal Efficiency or Monthly SO_2 Removal Efficiency specified for such Unit, or below the SO_2 30-Day Rolling Average Emission Rate specified for such Unit,

so long as NIPSCO timely reports the generation of such surplus SO_2 Allowances that occur after the Date of Entry of the Consent Decree in accordance with Section XIII (Periodic Reporting) of this Consent Decree.

86) Beginning with calendar year 2011, and continuing each calendar year thereafter, NIPSCO shall Surrender to EPA, or transfer to a non-profit third party selected by NIPSCO for Surrender, all SO_2 Allowances allocated to the NIPSCO System Units for

that calendar year that NIPSCO does not need in order to meet its own federal and/or state Clean Air Act statutory or regulatory requirements. This requirement to Surrender all such SO_2 Allowances is subject to Paragraph 85 of this Consent Decree. NIPSCO shall make such Surrender annually, within forty-five (45) days of NIPSCO's receipt of the Annual Deduction Reports for SO_2 from EPA. Surrender need not include the specific SO_2 Allowances that were allocated to NIPSCO System Units, so long as NIPSCO surrenders SO_2 Allowances that are from the same year or an earlier year and that are equal to the number required to be surrendered under this Paragraph.

87) If any allowances are transferred directly to a non-profit third party, NIPSCO shall include a description of such transfer in the next report submitted to EPA and the State of Indiana pursuant to Section XIII (Periodic Reporting) of this Consent Decree. Such report shall: (i) provide the identity of the non-profit third-party recipient(s) of the SO_2 Allowances and a listing of the serial numbers of the transferred SO_2 Allowances; and (ii) include a certification by the third-party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the allowances and will not use any of the SO_2 Allowances to meet any obligation imposed by any environmental law. No later than the third periodic report due after the transfer of any SO_2 Allowances, NIPSCO shall include a statement that the third-party recipient(s) Surrendered the SO_2 Allowances for permanent surrender to EPA in accordance with the provisions of Paragraph 86 within one (1) year after NIPSCO transferred the SO_2 Allowances to them. NIPSCO shall not have complied with the SO_2 Allowance Surrender requirements of this Paragraph until all third-party recipient(s) shall have actually Surrendered the transferred SO_2 Allowances to EPA.

88) For all SO_2 Allowances surrendered to EPA, NIPSCO or the third-party recipient(s) (as the case may be) shall first submit an SO_2 Allowance transfer request form to the EPA Office of Air and Radiation's Clean Air Markets Division ("CAMD") directing the transfer of such SO_2 Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, NIPSCO or the third-party recipient(s) shall irrevocably authorize the transfer of these SO_2 Allowances and identify by name of account and any applicable serial or other identification numbers or station names the source and location of the SO_2 Allowances being surrendered.

89) Nothing in this Consent Decree shall prevent NIPSCO from purchasing or otherwise obtaining SO_2 Allowances from another source for purposes of complying with state or federal Clean Air Act requirements to the extent otherwise allowed by law. Such allowances shall not be used to demonstrate compliance with the annual tonnage caps of this Consent Decree.

90) The requirements in Paragraphs 84 through 89 of this Decree pertaining to NIPSCO's surrender of SO_2 Allowances are permanent injunctions not subject to any termination provision of this Decree.

VI. PM EMISSION REDUCTIONS AND CONTROLS

A. Optimization of PM Emission Controls

91) Beginning ninety (90) days after the Date of Entry of this Consent Decree, and continuing thereafter, NIPSCO shall Continuously Operate each PM Control Device on each Unit within the NIPSCO System, to maximize the PM emission reductions at all times when the unit is in operation, provided that such operation of the PM Control Device is

consistent with the technological limitations, manufacturer's specifications and good engineering and maintenance practices for the PM Control Device. During any periods when any section or compartment of the PM control device is not operational, NIPSCO will minimize emissions to the extent practicable (as defined in 40 C.F.R. § 60.11(d)). Notwithstanding the foregoing sentences of this Paragraph 91, NIPSCO shall not be required to operate an ESP on any Unit if a fullstream baghouse is installed and operating to replace the ESP . Specifically, NIPSCO shall, at a minimum, to the extent practicable, and where applicable: (a) energize each available section of the ESP for each Unit, or at each Unit where a baghouse is installed, operate each compartment of the baghouse for each such Unit, regardless of whether that action is needed to comply with opacity limits; (b) maintain the energy or power levels delivered to the ESPs for each Unit to achieve optimal removal of PM, or at each Unit where a baghouse is installed, maintain and replace bags on each baghouse as needed to maximize collection efficiency; (c) at each Unit inspect the ESP or the baghouse (at any Unit where a baghouse is installed) for any openings or leakage in the casings, ductwork and expansion joints, and make best efforts to expeditiously repair and return to service any ESP section or baghouse compartment needing repair; (d) at each Unit where no baghouse is installed or operating, operate automatic control systems on the ESP, including the plate-cleaning and discharge electrode cleaning systems, to maximize control efficiency; and (e) at each Unit where a baghouse is installed and operating, make best efforts to expeditiously repair and return to service any failed baghouse compartment.

B. PM Emissions

92) Beginning for each Unit on the dates specified in Table 7 below, NIPSCO shall achieve and maintain a PM Emission Rate of no greater than 0.030 lb/mmBTU. If NIPSCO installs a fullstream baghouse on any of the Units identified in Table 7 to replace an existing ESP, pursuant to Paragraph 91 above, NIPSCO shall, upon installation of such baghouse, achieve and maintain a PM Emission Rate of no greater than 0.015 lb/mmBTU.

Table 7

NIPSCO System Unit	Date
Bailly Units 7 and 8 Main Stack (CS001)	December 31, 2010
Michigan City Unit 12	December 31, 2018
Schahfer Unit 14	December 31, 2013
Schahfer Unit 15	December 31, 2015
Schahfer Unit 17	December 31, 2010
Schahfer Unit 18	December 31, 2010

C. PM Emissions Testing

93) Beginning in calendar year 2011 and continuing in each calendar year thereafter, NIPSCO shall conduct a PM performance test on each NIPSCO System Unit identified in Table 7. The annual performance test requirement imposed on NIPSCO by this Paragraph may be satisfied by stack tests conducted by NIPSCO as may be required by its permits from the State of Indiana for any year that such stack tests are required under the permits. NIPSCO may perform testing every other year, rather than every year, provided

that two of the most recently completed test results from tests conducted in accordance with the methods and procedures specified in this Paragraph demonstrate that the PM emissions are equal to or less than 0.015 lb/mmBTU. NIPSCO shall perform testing every year, rather than every other year, beginning in the year immediately following any test result demonstrating that the PM emissions are greater than 0.015 lb/mmBTU.

D. General PM Provision

94) The reference methods and procedures for determining compliance with PM Emission Rates shall be those specified in 40 C.F.R. Part 60, Appendix A, Method 5, or an alternative method that is promulgated by EPA, requested for use herein by NIPSCO, and approved for use herein by EPA and IDEM. Use of any particular method shall conform to the EPA requirements specified in 40 C.F.R. Part 60, Appendix A and 40 C.F.R. §§ 60.48a (b) and (e), or any federally approved method contained in the Indiana SIP. NIPSCO shall calculate the PM Emission Rates from the stack test results in accordance with 40 C.F.R. § 60.8(f). The results of each PM stack test shall be submitted to EPA and IDEM within forty-five (45) days of completion of each test.

VII. UNIT RETIREMENT

95) No later than December 31, 2010, NIPSCO shall Retire Mitchell Units 4, 5, 6, and 11.

96) If NIPSCO elects to Retire any Unit within the NIPSCO System other than Michigan City Unit 12 or Mitchell Units 4,5,6, and 11, such Retirement shall not alter the Annual System Tonnage Limitations as described in Tables 4 and 6.

VIII. PROHIBITION ON NETTING CREDITS OR OFFSETS FROM REQUIRED CONTROLS

97) Emission reductions that result from actions to be taken by NIPSCO after the Date of Entry of this Consent Decree to comply with the requirements of this Consent Decree shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining a netting or offset credit under the Clean Air Act's Nonattainment NSR and PSD programs.

98) The limitations on the generation and use of netting credits or offsets set forth in the previous Paragraph 97 do not apply to emission reductions achieved by NIPSCO System Units that are greater than those required under this Consent Decree. For purposes of this Paragraph, emission reductions from a NIPSCO System Unit are greater than those required under this Consent Decree if, for example, they result from NIPSCO's compliance with federally enforceable emission limits that are more stringent than those limits imposed on the NIPSCO System and individual Units under this Consent Decree and under applicable provisions of the Clean Air Act or the Indiana SIP.

99) Nothing in this Consent Decree is intended to preclude the emission reductions generated under this Consent Decree from being considered by the State of Indiana or EPA as creditable contemporaneous emission decreases for the purpose of attainment demonstrations submitted pursuant to § 110 of the Act, 42 U.S.C. § 7410, or in determining impacts on NAAQS.

100) Nothing in this Consent Decree precludes any emissions from any NIPSCO System Units that occur either prior to the Date of Entry of this Consent Decree or thereafter from being considered in any modeling analyses required pursuant to 40 C.F.R. Part 52 or the Prevention of Significant Deterioration regulations under the Indiana

SIP for purposes of demonstrating compliance with PSD increments or air quality related values, including visibility, in a Class I area.

IX. PM AND MERCURY CONTINUOUS EMISSION MONITORING SYSTEMS (CEMS)

101) Within eighteen months after the Date of Entry of this Consent Decree, or within 90 days of EPA's approval of NIPSCO's timely submittal under Paragraph 104, whichever is later, NIPSCO shall install, certify, maintain, and operate two PM CEMS and two mercury CEMS. NIPSCO shall install each PM CEMS and mercury CEMS such that representative measurements of emissions are obtained from the monitored unit(s). Each CEMS shall complete a minimum of one cycle of operations (sampling, analyzing and data recording) for each successive 15-minute period. Except for CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, NIPSCO shall continuously operate the PM CEMS and mercury CEMS consistent with technical limitations and manufacturer specifications.

102) The PM CEMS identified in Paragraph 101 above, shall be installed at NIPSCO's Michigan City Unit 12 and Schahfer Unit 15. The PM CEMS shall comprise a continuous particle mass monitor measuring particulate matter concentration, directly or indirectly, on a continuous basis. NIPSCO shall install a diluent monitoring system on Michigan City Unit 12 and Schahfer Unit 15 such that the PM mass concentration can be converted to units of lb/mmBTU. NIPSCO shall certify the two PM CEMS in accordance with 40 C.F.R. Part 60, Appendix B, Performance Specification 11. NIPSCO shall submit installation plans, operation plans and perform testing and reporting in accordance with Paragraphs 104 through 106 of this Consent Decree. In the event NIPSCO elects to retire

Michigan City Unit 12, PM CEMS shall be installed on Schahfer Unit 14 in accordance with the requirements of this Paragraph prior to the retirement of Michigan City Unit 12.

103) The mercury CEMS identified in Paragraph 101 shall be installed at NIPSCO's Michigan City Unit 12 and Schahfer Unit 15. The mercury CEMS shall be comprised of a continuous total vapor phase mercury monitoring device which measures total vapor phase mercury concentration, directly or indirectly, on a continuous basis. NIPSCO shall install a diluent monitoring system on Michigan City Unit 12 and Schahfer Unit 15, such that the mercury concentrations can be converted to units of pounds per trillion BTU (lb-mercury/TBTU) on an hourly average basis. NIPSCO shall certify the Mercury CEMS in accordance with 40 C.F.R. Part 60, Appendix B, Performance Specification 12a. NIPSCO shall submit installation plans, operation plans and perform testing and reporting in accordance with Paragraphs 104 through 106 of this Consent Decree. In the event NIPSCO elects to retire Michigan City Unit 12, mercury CEMS shall be installed on Schahfer Unit 14 in accordance with the requirements of this Paragraph prior to the retirement of Michigan City Unit 12.

104) Within six (6) months after the Date of Entry of this Consent Decree, NIPSCO shall submit to EPA for review and approval pursuant to Section XIV (Review and Approval of Submittals) of this Consent Decree the following information regarding the PM and mercury CEMS: (a) a plan for the installation, certification and operation of the CEMS; and (b) no less than six (6) months prior to conducting tests in accordance with Paragraph 105 of this Consent Decree a proposed QA/QC protocol that shall be followed in calibrating each PM CEMS and mercury CEMS. In developing both the plan for installation and certification of the PM and mercury CEMS and the QA/QC protocol,

NIPSCO shall use the criteria set forth in 40 C.F.R. Part 60, Appendix B (PS 11 and PS 12a). EPA shall expeditiously review such submissions. Following approval by EPA, NIPSCO shall thereafter operate the PM and mercury CEMS in accordance with the approved protocols.

105) No later than ninety days (90) after the deadline imposed by Paragraph 101, or within 90 days after EPA's approval of NIPSCO's submittals pursuant to Paragraph 104, whichever is later, NIPSCO shall conduct tests on each PM CEMS and mercury CEMS to demonstrate compliance with the CEMS installation and certification plan submitted to and approved by EPA in accordance with Paragraph 104. NIPSCO shall submit the results of all certification testing (including incomplete testing and associated Reference Method Testing) to EPA and IDEM within forty-five (45) days of completion of certification testing

106) Upon completion of testing in accordance with Paragraph 105 above, NIPSCO shall begin and continue to report to EPA, pursuant to Section XIII (Periodic Reporting), the data recorded by the PM and mercury CEMS, expressed in lb-PM/mmBTU and lb-mercury/TBTU, respectively. The data shall be reported as a three-hour rolling average basis in electronic format, as required by Section XIII, and shall include: each exceedance of an applicable PM mass emission limit (including those occurring during startup, shutdown and/or Malfunction), the magnitude of each exceedance, the date and time of commencement and completion of each period of exceedance, the process operating time during the reporting period, the nature and cause of each exceedance, the corrective action(s) taken or preventative measure(s) adopted in response to each exceedance, the date and time of each period during which any of the CEMS were

inoperative (except for zero and span checks), and the nature of system repairs or adjustments. For purposes of this Consent Decree, stack testing pursuant to Paragraph 94 shall be the method to determine compliance with the PM Emission Rate established by this Consent Decree. However, data from the PM CEMS shall be used to, at a minimum, monitor progress in reducing PM emissions.

107) Nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law (including any defenses, entitlements, challenges, or clarifications related to the Credible Evidence Rule, 40 C.F.R. § 52.12(c) (62 Fed. Reg. 8,315; Feb. 27, 1997)) concerning the use of data for any purpose under the Act.

X. ENVIRONMENTAL MITIGATION PROJECTS

108) NIPSCO shall implement the Environmental Mitigation Projects ("Projects") described in Appendix A to this Consent Decree in compliance with the approved plans and schedules for such Projects and other terms of this Consent Decree. NIPSCO shall submit plans for the Projects to Plaintiffs for review and approval pursuant to Section XIV (Review and Approval of Submittals) of this Consent Decree in accordance with the schedules set forth in Appendix A. In implementing the Projects, NIPSCO shall spend no less than $9.5 million in Project Dollars within five (5) years of the Date of Entry of this Consent Decree. NIPSCO shall maintain, and present to Plaintiffs upon request, all documents to substantiate the Project Dollars expended and shall provide these documents to Plaintiffs within thirty (30) days of a request.

109) All plans and reports prepared by NIPSCO pursuant to the requirements of this Section of the Consent Decree and required to be submitted to EPA shall be publicly available from NIPSCO without charge.

110) NIPSCO shall certify, as part of each plan submitted to Plaintiffs for any Project, that NIPSCO is not otherwise required by law to perform the Project described in the plan, that NIPSCO is unaware of any other person who is required by law to perform the Project, and that NIPSCO will not use any Project, or portion thereof, to satisfy any obligations that it may have under other applicable requirements of law, including any applicable renewable portfolio standards or energy conservation standards.

111) NIPSCO shall use good faith efforts to secure as much benefit as possible for the Project Dollars expended, consistent with the applicable requirements and limits of this Consent Decree.

112) If NIPSCO elects (where such an election is allowed) to undertake a Project by contributing funds to another person or entity that will carry out the Project in lieu of NIPSCO, but not including NIPSCO's agents or contractors, that person or instrumentality must, in writing: (a) identify its legal authority for accepting such funding; and (b) identify its legal authority to conduct the Project for which NIPSCO contributes the funds. Regardless of whether NIPSCO elected (where such election is allowed) to undertake a Project by itself or to do so by contributing funds to another person or instrumentality that will carry out the Project, NIPSCO acknowledges that it will receive credit for the expenditure of such funds as Project Dollars only if NIPSCO demonstrates that the funds have been actually spent by either NIPSCO or by the person or instrumentality receiving them (or, in the case of internal costs, have actually been incurred by NIPSCO), and that such expenditures met all requirements of this Consent Decree.

113) Beginning six (6) months after the Date of Entry of this Consent Decree, and continuing until completion of each Project (including any applicable periods of

demonstration or testing), NIPSCO shall provide Plaintiffs with semi-annual updates concerning the progress of each Project.

114) Within sixty (60) days following the completion of each Project required under this Consent Decree (including any applicable periods of demonstration or testing), NIPSCO shall submit to Plaintiffs a report that documents the date that the Project was completed, NIPSCO's results from implementing the Project, including the emission reductions or other environmental benefits achieved, and the Project Dollars expended by NIPSCO in implementing the Project (including the emission reductions achieved for SO_2, NO_x, PM, and CO_2).

115) In connection with any communication to the public or to shareholders regarding NIPSCO's actions or expenditures relating in any way to the Environmental Mitigation Projects in this Consent Decree, NIPSCO shall include prominently in the communication the information that the actions and expenditures were required as part of a consent decree to resolve allegations that NIPSCO violated the Clean Air Act.

XI. <u>CIVIL PENALTY</u>

116) Within thirty (30) calendar days after the Date of Entry of this Consent Decree, NIPSCO shall pay to the United States and the State of Indiana a civil penalty in the amount of $3.5 million, as follows:

(a) NIPSCO shall pay a civil penalty of $ 3.3 million to the United States. The civil penalty to the United States shall be paid by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures, referencing DOJ Case Number 90-5-2-1-08417 and the civil action case name and case number of this action. The costs of such

EFT shall be NIPSCO's responsibility. Payment shall be made in accordance with timely instructions provided to NIPSCO by the Financial Litigation Unit of the U.S. Attorney's Office for the Northern District of Indiana. Any funds received after 2:00 p.m. EDT shall be credited on the next business day. At the time of payment, NIPSCO shall provide notice of payment, referencing the USAO File Number, the DOJ Case Number, and the civil action case name and case number, to the Department of Justice and to EPA in accordance with Section XXI (Notices) of this Consent Decree.

(b) NIPSCO shall pay a civil penalty of $200,000 to the State of Indiana. Payment shall be made by check made out to the "Environmental Management Special Fund" and shall be mailed to:

Indiana Department of Environmental Management
Cashier- Mail Code 50-10C
100 North Senate Avenue
Indianapolis, IN 46204-2251

117) Failure to timely pay the civil penalty shall subject NIPSCO to interest accruing from the date payment is due until the date payment is made at the rate prescribed by 28 U.S.C. § 1961, and shall render NIPSCO liable for all charges, costs, fees, and penalties established by law for the benefit of a creditor or of the United States in securing payment.

118) Payments made pursuant to this Section are penalties within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. § 162(f), and are not tax-deductible expenditures for purposes of federal law.

XII. RESOLUTION OF PAST AND FUTURE CLAIMS

A. Resolution of Plaintiffs' Civil Claims

119) Claims of the United States Based on Modifications Occurring Before the Lodging of Decree. Entry of this Consent Decree shall resolve all civil claims of the United States under:

a. Parts C and D of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492, 7501-7515, and the implementing federal and state rules, including the Indiana SIP approved under Section 110 of the Act implementing Parts C or D of Subchapter I; and

b. Title V of the Clean Air Act, 42 U.S.C. §§ 7661-7661f, and the implementing Title V operating permit program, including regulations that EPA has approved and/or promulgated under the Act, but only to the extent that such claims are based on NIPSCO's failure to obtain or amend an operating permit or failure to submit or amend an operating permit application that reflects applicable requirements imposed under Parts C and D of Subchapter I of the Clean Air Act;

that arose from or are based on any modification that commenced at any NIPSCO System Unit prior to the Date of Lodging of this Consent Decree, including but not limited to those claims and modifications alleged in the Complaint filed by the Plaintiffs in this civil action and those claims and modifications asserted in the NOV issued by EPA to NIPSCO**.**

120) Claims of the State of Indiana Based on Modifications Occurring Before the Lodging of Decree. Entry of this Decree shall resolve all civil claims of the State of Indiana under:

a. Parts C and D of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492, 7501-7515, and the implementing federal and state rules, including all civil claims under Indiana regulations at 326 IAC 2-1 *et seq.* (Construction and Operating Permit Requirements), 326 IAC 2-2 *et seq*. (PSD Requirements) and 326 IAC 2-3 *et seq*. (Emission Offset), and any related Indiana statutes, including all versions of the Indiana major New Source Review program that existed at the time of the modifications alleged in the Complaint to any NIPSCO System Unit;

b. Indiana regulations at 326 IAC 2 that govern minor New Source Review and any related Indiana statutes, including any Indiana rule governing minor New Source Review that existed at the time of the modifications alleged in the Complaint to any NIPSCO System Unit; and

c. Indiana statutes as they specifically apply to the programs implemented pursuant to Subchapter V of the Act, as well as Indiana regulations at 326 IAC 2-7 *et seq*. (Part 70 Permit Program);

that arose from or are based on any modification that commenced at any NIPSCO System Unit prior to the Date of Lodging of this Consent Decree, including but not limited to those claims and modifications alleged in the Complaint filed by the Plaintiffs in this civil action and those claims and modifications asserted in the NOV issued by EPA to NIPSCO**.**

121) Plaintiffs' Claims Based on Modifications After the Lodging of Decree. Entry of this Consent Decree also shall resolve all civil claims of the United States and of the State of Indiana for pollutants, except sulfuric acid mist, regulated under Parts C and D of Subchapter I of the Clean Air Act, and under regulations promulgated as of the Date of

Lodging of this Consent Decree, where such claims are based on any modification completed before December 31, 2018, and

a. is commenced at any NIPSCO System Unit after the Date of Lodging; or

b. that this Consent Decree expressly directs NIPSCO to undertake.

The term "modification" as used in this Paragraph 121 shall have the meaning that term is given under the Clean Air Act or under the regulations promulgated thereunder as of the Date of Lodging of this Consent Decree. For purposes of this Paragraph 121, civil claims shall not include greenhouse gases (carbon dioxide, nitrous oxide, methane, hydroflurorcarbons, perfluorocarbons, and sulfur hexafluoride) even if greenhouse gases are pollutants regulated under Part C or D of Subchapter I of the Act, and under regulations promulgated thereunder.

122) Reopener. The resolution of the civil claims of the United States and the State of Indiana provided by this Subsection is subject to the provisions of Subsection B of this Section.

B. Pursuit of Plaintiffs' Civil Claims Otherwise Resolved

123) Bases for Pursuing Resolved Claims Across NIPSCO System. If NIPSCO violates an Annual Tonnage Limits in Tables 4 or 6, or fails by more than ninety (90) days to complete upgrading of the Bailly FGD or installation and commence operation of any emission control device required pursuant to this Consent Decree; or fails by more than ninety (90) days to retire and permanently cease to operate all Mitchell Units pursuant to Section VII (Unit Retirement), then the United States or the State of Indiana may pursue any claim at any NIPSCO System Unit that has otherwise been resolved under Subsection A of this Section, subject to (a) and (b) below.

a. For any claims based on modifications undertaken at an Other Unit (i.e. any Unit of the NIPSCO System that is not an Improved Unit for the pollutant in question), claims may be pursued only where the modification(s) on which such claim is based was commenced within the five years preceding the violation or failure specified in this Paragraph.

b. For any claims based on modifications undertaken at an Improved Unit, claims may be pursued only where the modification(s) on which such claim is based was commenced: (i) after lodging of the Consent Decree, and (ii) within the five years preceding the violation or failure specified in this Paragraph.

124) Additional Bases for Pursuing Resolved Claims for modifications at an Improved Unit. Solely with respect to Improved Units, the United States or the State of Indiana may also pursue claims arising from a modification (or collection of modifications) at an Improved Unit that have otherwise been resolved under Section XII, Subsection A, if the modification (or collection of modifications) at the Improved Unit on which such claim is based: (i) was commenced after the Date of Lodging, and (ii) individually (or collectively) increased the maximum hourly emission rate of that Unit for NO_x or SO_2 (as measured by 40 C.F.R. § 60.14 (b) and (h)) by more than ten percent (10%).

125) Additional Bases for Pursuing Resolved Claims for Modifications at an Other Unit. Solely with respect to Other Units, the United States or the State of Indiana may also pursue claims arising from a modification (or collection of modifications) at an Other Unit that have otherwise been resolved under Section XII, Subsection A, if the

modification (or collection of modifications) on which the claim is based was commenced within the five years preceding any of the following events:

a. a modification (or collection of modifications) at such Other Unit commenced after the Date of Lodging that increases the maximum hourly emission rate for such Other Unit for the relevant pollutant (only NO_x or SO_2) as measured by 40 C.F.R. § 60.14(b) and (h);

b. the aggregate of all Capital Expenditures paid at such Other Unit exceed $150/KW on the Unit's Boiler Island (based on the capacity numbers included in Paragraph 36) during January 1, 2011, through December 31, 2017. (Capital Expenditures shall be measured in calendar year 2009 constant dollars, as adjusted by the McGraw-Hill Engineering News-Record Construction Cost Index); or

c. a modification (or collection of modifications) at such Other Unit commenced after the Date of Lodging results in an emissions increase of NO_x and/or SO_2 at such Other Unit, and such increase:

    i. presents, by itself, or in combination with other emissions or sources, "an imminent and substantial endangerment" within the meaning of Section 303 of the Act, 42 U.S.C. §7603;

    ii. causes or contributes to violation of a NAAQS in any Air Quality Control Area that is in attainment with that NAAQS;

    iii. causes or contributes to violation of a PSD increment; or

    iv. causes or contributes to any adverse impact on any formally recognized air quality and related values in any Class I area.

d. The introduction of any new or changed NAAQS shall not, standing alone, provide the showing needed under subparagraph (c) of this Paragraph to pursue any claim for a modification at an Other Unit resolved under Subsection A of this Section.

XIII. <u>PERIODIC REPORTING</u>

126) Pursuant to Paragraph 93 of this Consent Decree, NIPSCO shall conduct performance tests for PM that demonstrate compliance with the PM Emission Rate required by this Consent Decree with respect to NIPSCO System Units. Within forty-five (45) days of each such performance test, NIPSCO shall submit the results of the performance test to EPA and IDEM at the address specified in Section XXI (Notices) of this Consent Decree.

127) Beginning thirty (30) days after the end of the second calendar quarter following the Date of Entry of this Consent Decree, and continuing on a semi-annual basis until termination of this Consent Decree, and in addition to any other express reporting requirement in this Consent Decree, NIPSCO shall submit to EPA a progress report containing the following information:

a. all information necessary to determine compliance with the requirements of the following Tables of this Consent Decree: Tables 1, 2, 3 and 4 concerning NO_X emissions; Tables 5 and 6 concerning SO_2 emissions (including information related to burning of low sulfur coal at Bailly Units 7 and 8); and Table 7 concerning PM emissions;

b. documentation of any Capital Expenditures at a Unit's Boiler Island made during the period covered by the progress report and cumulative Boiler Island Capital Expenditures to date;

c. all information relating to emission allowances and credits that NIPSCO claims to have generated in accordance with Paragraphs 70 and 85, through compliance beyond the requirements of this Consent Decree;

d. all information indicating the status of installation and commencement of operation of pollution controls, including information that the installation and commencement of operation of a pollution control device may be delayed, including the nature and cause of the delay, and any steps taken by NIPSCO to mitigate such delay;

e. all affirmative defenses asserted by NIPSCO pursuant to Section XVII (Affirmative Defense) for that quarter;

f. all information relating to excess emissions due to startup, shutdown, and Malfunction emissions, including steps taken to minimize the adverse effects of such excess emissions; and

g. information verifying compliance with:

    i. Continuous Operation of all pollution control equipment,

    ii. allowance Surrender requirements, including supporting calculations, and

    iii. optimization of any ESP's, including any periods during which all sections were not in service, the reasons therefore and actions taken to remedy such failure.

128) In any periodic progress report submitted pursuant to this Section, NIPSCO may incorporate by reference information previously submitted under its Title V permitting requirements, provided that NIPSCO attaches the Title V permit report, or the relevant portion thereof, and provides a specific reference to the provisions of the Title V permit report that are responsive to the information required in the periodic progress report.

129) In addition to the progress reports required pursuant to this Section, NIPSCO shall provide a written report to EPA of any violation of the requirements of this Consent Decree within fifteen (15) calendar days of when NIPSCO knew or should have known of any such violation. In this report, NIPSCO shall explain the cause or causes of the violation and all measures taken or to be taken by NIPSCO to prevent such violations in the future.

130) Each NIPSCO report shall be signed by NIPSCO's Vice President of Generation or his or her equivalent or designee of at least the rank of Vice President, and shall contain the following certification:

> This information was prepared either by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my evaluation, or the directions and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, I hereby certify under penalty of law that, to the best of my knowledge and belief, this information is true, accurate, and complete. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.

131) If any Allowances are Surrendered to any third party pursuant to this Consent Decree, the third party's certification pursuant to Paragraphs 72 and 87, shall be signed by a managing officer of the third party and shall contain the following language:

> I certify under penalty of law that,_____________ [name of third party] will not sell, trade, or otherwise exchange any of the allowances and will not use any of the allowances to meet any obligation imposed by any environmental law. I

understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.

XIV. REVIEW AND APPROVAL OF SUBMITTALS

132) Unless otherwise provided, NIPSCO shall submit each plan, report, or other submission required by this Consent Decree to Plaintiffs whenever such a document is required to be submitted for review or approval pursuant to this Consent Decree. Plaintiffs may approve the submittal or decline to approve it and provide written comments explaining the bases for declining such approval. Within sixty (60) days of receiving written comments from Plaintiffs, NIPSCO shall either: (a) revise the submittal consistent with the written comments and provide the revised submittal to Plaintiffs; or (b) submit the matter for dispute resolution, including the period of informal negotiations, under Section XVIII (Dispute Resolution) of this Consent Decree.

133) Upon receipt of EPA's final approval of the submittal, or upon completion of the submittal pursuant to dispute resolution, NIPSCO shall implement the approved submittal in accordance with the schedule specified therein or another EPA-approved schedule.

XV. STIPULATED PENALTIES

134) For any failure by NIPSCO to comply with the terms of this Consent Decree, and subject to the provisions of Sections XVI (Force Majeure), VXII (Affirmative Defenses) and XVIII (Dispute Resolution), NIPSCO shall pay, within thirty (30) days after receipt of written demand to NIPSCO by the United States, the following stipulated penalties to the United States:

Table 8

Consent Decree Violation	**Stipulated Penalty**
a. Failure to pay the civil penalty as specified in Section XI (Civil Penalty) of this Consent Decree.	$10,000 per day
b. Failure to comply with any applicable 30-Day Rolling Average Emission Rate for SO_2 or NOx, where the violation is less than 5% in excess of the limits set forth in this Consent Decree.	$2,500 per day per violation
c. Failure to comply with any applicable 30-Day Rolling Average Emission Rate for SO_2 or NOx, where the violation is equal to or greater than 5% but less than 10% in excess of the limits set forth in this Consent Decree.	$5,000 per day per violation
d. Failure to comply with any applicable 30-Day Rolling Average Emission Rate for SO_2 or NOx, where the violation is equal to or greater than 10% in excess of the limits set forth in this Consent Decree.	$10,000 per day per violation
e. Failure to comply with any applicable average Removal Efficiency for SO2 where the violation is equal to or less than 0.15% less than the applicable limit.	$2,500 per day per violation
f. Failure to comply with any applicable average Removal Efficiency for SO2 where the violation is greater than 0.15% but less than 0.3% less than the applicable limit.	$5,000 per day per violation
g. Failure to comply with any applicable average Removal Efficiency for SO2 where the violation is equal to or greater than 0.3% less than the applicable limit.	$10,000 per day per violation
h. Failure to comply with any applicable 365-Day Rolling Average Emission Rate for NOx, where the violation is less than 5% in excess of the limits set forth in this Consent Decree.	$350 per day of violation for a 365-Day Rolling Average Emission Rate violation, plus $4,000 for each subsequent 365-Day Rolling Average Emission Rate violation that includes any day in a previously assessed 365-Day Rolling Average Emission Rate violation (*e.g.*, if a violation of the 365-Day Rolling Average

	Emission Rate for a Unit first occurs on June 1, 2010, occurs again on June 2, 2010, and again on May 31, 2011, the total stipulated penalty assessed for these three violations would equal $135,750).
i. Failure to comply with any applicable 365-Day Rolling Average Emission Rate for NOx, where the violation is equal to or greater than 5% but less than 10% in excess of the limits set forth in this Consent Decree.	$450 per day of violation for a 365-Day Rolling Average Emission Rate violation, plus $5,000 for each subsequent 365-Day Rolling Average Emission Rate violation that includes any day in a previously assessed 365-Day Rolling Average Emission Rate violation (*e.g.*, if a violation of the 365-Day Rolling Average Emission Rate for a Unit first occurs on June 1, 2010, occurs again on June 2, 2010, and again on May 31, 2011, the total stipulated penalty assessed for these three violations would equal $174,250).
j. Failure to comply with any applicable 365-Day Rolling Average Emission Rate for NOx, where the violation is equal to or greater than 10% in excess of the limits set forth in this Consent Decree.	$600 per day of violation for a 365-Day Rolling Average Emission Rate violation, plus $6,000 for each subsequent 365-Day Rolling Average Emission Rate violation that includes any day in a previously assessed 365-Day Rolling Average Emission Rate violation (*e.g.*, if a violation of the 365-Day Rolling Average Emission Rate for a Unit first occurs on June 1, 2010, occurs again on June 2, 2010, and again on May 31, 2011, the total stipulated penalty assessed for these three violations would equal $231,000).
k. Failure to comply with the Annual Tonnage Limits	$5,000 per ton for the first 1000 tons, and $10,000 per ton for each

for SO_2.	additional ton above 1000 tons. In addition, NIPSCO shall Surrender, pursuant to the procedures set forth in Paragraph 86, SO_2 Allowances in an amount equal to two times the number of tons by which the limitation was exceeded
l. Failure to comply with the Annual Tonnage Limits for NO_X.	$5,000 per ton for the first 1000 tons, and $10,000 per ton for each additional ton above 1000 tons. In addition, NIPSCO shall Surrender, pursuant to the procedures set forth in Paragraph 71, NO_x Allowances in an amount equal to two times the number of tons by which the limitation was exceeded.
m. Operation of a Unit required under this Consent Decree to be equipped with any NO_X, SO_2, or PM control device without the operation of such device, to the extent operation of that control device is required under this Consent Decree.	$10,000 per day per violation during the first 30 days, $27,500 per day per violation thereafter
n. Failure to install or operate CEMS as required in this Consent Decree.	$1,000 per day per violation
o. Failure to conduct performance tests of PM emissions, as required in this Consent Decree.	$1,000 per day per violation
p. Failure to apply for any permit, or amendment or application therefor, required by Section XIX (Permits and SIP Revisions).	$1,000 per day per violation
q. Failure to timely submit, modify, or implement, as approved, the reports, plans, studies, analyses, protocols, or other submittals required by this Consent Decree.	$750 per day per violation during the first ten days, $1,000 per day per violation thereafter
r. Selling or trading NO_X Allowances except as permitted by Section IV. D (Use and Surrender of NOx Allowances).	The surrender of NO_X Allowances in an amount equal to four times the number of NO_X Allowances used, sold, or transferred in violation of this Consent Decree
s. Selling or trading SO_2 Allowances except as permitted	The surrender of SO_2 Allowances

by Section V.D (Use and Surrender of SO_2 Allowances).	in an amount equal to four times the number of SO_2 Allowances used, sold, or transferred in violation of this Consent Decree
t. Failure to Surrender NOx Allowances as required by Paragraph 71.	(a) $27,500 per day plus (b) $1,000 per NOx Allowance not surrendered
u. Failure to Surrender SO_2 Allowances as required by Paragraph 86.	(a) $27,500 per day plus (b) $1,000 per SO_2 Allowance not surrendered
v. Failure to demonstrate the third-party Surrender of an NOx Allowance in accordance with Paragraphs 72 and 73.	$2,500 per day per violation
w. Failure to demonstrate the third-party surrender of an SO_2 Allowance in accordance with Paragraphs 87 and 88.	$2,500 per day per violation
x. Failure to undertake and complete any of the Environmental Mitigation Projects in compliance with Section X (Environmental Mitigation Projects) of this Consent Decree.	$1,000 per day per violation during the first 30 days, $5,000 per day per violation thereafter
y. Failure to notify EPA of its decision to adopt any NOx or SO2 Option pursuant to Tables 1 and 5.	$1,000 per day per violation
z. Violating an applicable PM Emission Rate based on the results of a stack test required pursuant to Paragraph 94 of this Consent Decree, where the violation is less than 5% in excess of the limit set forth in this Consent Decree.	$2,500 per day, starting on the day a stack test result demonstrates a violation and continuing each day thereafter until and excluding such day on which a subsequent stack test* demonstrates compliance with the applicable PM Emission Rate
aa. Violating an applicable PM Emission Rate based on the results of a stack test required pursuant to Paragraph 94 of this Consent Decree, where the violation is equal to or greater than 5% but less than 10% in excess of the limit set forth in this Consent Decree.	$5,000 per day, starting on the day a stack test result demonstrates a violation and continuing each day thereafter until and excluding such day on which a subsequent stack test* demonstrates compliance with the applicable PM Emission

	Rate
bb. Violating an applicable PM Emission Rate based on the results of a stack test required pursuant to Paragraph 94 of this Consent Decree, where the violation is equal to or greater than 10% in excess of the limits set forth in this Consent Decree.	$10,000 per day, starting on the day a stack test result demonstrates a violation and continuing each day thereafter until and excluding such day on which a subsequent stack test* demonstrates compliance with the applicable PM Emission Rate
cc. Failure to optimize ESP or Baghouse pursuant to Paragraph 91.	$2,500 per day
dd. Any other violation of this Consent Decree	$1,000 per day per violation

*NIPSCO shall not be required to make any submission, including any notice or test protocol, or to obtain any approval to or from EPA or IDEM in advance of conducting such a subsequent stack test.

135) Violations of any limit based on a 30-Day Rolling Average constitute thirty (30) days of violation, but where such a violation (for the same pollutant and from the same Unit) recurs within periods less than thirty (30) Operating Days, NIPSCO shall not be obligated to pay a daily stipulated penalty for any day of the recurrence for which a stipulated penalty has already been paid.

136) Violations of any limit based on a 365-Day Rolling Average constitute 365 days of violation, but where such a violation (for the same pollutant and from the same Unit) recurs within periods less than 365 Operating Days, NIPSCO shall not be obligated to pay a daily stipulated penalty for any day of the recurrence for which a stipulated penalty has already been paid.

137) A violation of the Monthly SO_2 Removal Efficiency for a given Calendar Month shall constitute a violation on each day within the Month. For clarity, if NIPSCO Surrenders SO_2 allowances pursuant to Paragraph 79 of this Consent Decree as a means to

comply with the Monthly SO_2 Removal Efficiency requirement, there is no Monthly SO_2 Removal Efficiency violation.

138) All stipulated penalties shall begin to accrue on the day after the performance is due or on the day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases, whichever is applicable. Nothing in this Consent Decree shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Consent Decree.

139) NIPSCO shall pay all stipulated penalties to the United States within thirty (30) days of receipt of written demand to NIPSCO from the United States, and shall continue to make such payments every thirty (30) days thereafter until the violation(s) no longer continues, unless NIPSCO elects within twenty (20) days of receipt of written demand to NIPSCO from the United States to dispute the obligation to pay or the accrual of stipulated penalties in accordance with the provisions in Section XVIII (Dispute Resolution) of this Consent Decree.

140) Stipulated penalties shall continue to accrue as provided in accordance with Paragraph 134 during any dispute, with interest on accrued stipulated penalties payable and calculated at the rate established by the Secretary of the Treasury, pursuant to 28 U.S.C. § 1961, but need not be paid until the following:

a. If the dispute is resolved by agreement, or by a decision of Plaintiffs pursuant to Section XVIII (Dispute Resolution) of this Consent Decree that is not appealed to the Court, accrued stipulated penalties agreed or determined to be owing, together with accrued interest, shall be paid within thirty (30) days of the effective date of the agreement or of the receipt of Plaintiffs' decision;

b. If the dispute is appealed to the Court and Plaintiffs prevail in whole or in part, NIPSCO shall, within sixty (60) days of receipt of the Court's decision or order, pay all accrued stipulated penalties determined by the Court to be owing, together with interest accrued on such penalties determined by the Court to be owing, except as provided in subparagraph (c) of this Paragraph; or

c. If the Court's decision is appealed by any Party, NIPSCO shall, within fifteen (15) days of receipt of the final appellate court decision, pay all accrued stipulated penalties determined to be owing, together with interest accrued on such stipulated penalties determined to be owing by the appellate court.

Notwithstanding any other provision of this Consent Decree, the accrued stipulated penalties agreed by Plaintiffs and NIPSCO, or determined by Plaintiffs through Dispute Resolution, to be owing may be less than the stipulated penalty amounts set forth in Paragraph 134.

141) All stipulated penalties shall be paid in the manner set forth in Section XI (Civil Penalty) of this Consent Decree.

142) Should NIPSCO fail to pay stipulated penalties in compliance with the terms of this Consent Decree, the United States shall be entitled to collect interest on such penalties, as provided for in 28 U.S.C. § 1961.

143) The stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States or the State of Indiana by reason of NIPSCO's failure to comply with any requirement of this Consent Decree or applicable law, except that for any violation of this Consent Decree (for which this Consent Decree provides for payment of a stipulated penalty) that is also a violation of the Act, including the implementing Title V operating permit program, regulations EPA has approved and/or promulgated under the Act, the Indiana SIP, including Indiana regulations under 326 IAC Article 2, or of an operable Title V permit, NIPSCO shall be allowed a credit for stipulated penalties paid against any statutory or regulatory penalties also imposed for such violation.

XVI. FORCE MAJEURE

144) For purposes of this Consent Decree, a "Force Majeure Event" shall mean an event that has been or will be caused by circumstances beyond the control of NIPSCO, its contractors, or any entity controlled by NIPSCO that delays compliance with any provision of this Consent Decree or otherwise causes a violation of any provision of this Consent Decree despite NIPSCO's best efforts to fulfill the obligation. "Best efforts to fulfill the obligation" include using best efforts to anticipate any potential Force Majeure Event and to address the effects of any such event: (a) as it is occurring; and (b) after it has occurred, such that the delay and violation are minimized to the greatest extent possible and the emissions during such event are minimized to the greatest extent possible. Specific references to Force Majeure in other parts of this Consent Decree do not restrict the ability of NIPSCO to assert Force Majeure pursuant to the process described in this section. .

145) Notice of Force Majeure Events. If any event occurs or has occurred that may delay compliance with or otherwise cause a violation of any obligation under this Consent Decree, as to which NIPSCO intends to assert a claim of Force Majeure, NIPSCO shall notify Plaintiffs in writing as soon as practicable, but in no event later than fourteen (14) business days following the date NIPSCO first knew, or by the exercise of due diligence should have known, that the event caused or may cause such delay or violation. In this notice, NIPSCO shall reference this Paragraph of this Consent Decree and describe the anticipated length of time that the delay or violation may persist, the cause or causes of the delay or violation, all measures taken or to be taken by NIPSCO to prevent or minimize the delay or violation, the schedule by which NIPSCO proposes to implement those measures, and NIPSCO's rationale for attributing a delay or violation to a Force Majeure Event. A copy of this notice shall be sent electronically, as soon as practicable, to the U.S. Department of Justice, EPA, and IDEM. NIPSCO shall adopt all reasonable measures to avoid or minimize such delays or violations and any resulting emissions. NIPSCO shall be deemed to know of any circumstance which NIPSCO, its contractors, or any entity controlled by NIPSCO knew or should have known.

146) Failure to Give Notice. If NIPSCO fails to comply with the notice requirements of this Section, EPA may void NIPSCO's claim for Force Majeure as to the specific event for which NIPSCO has failed to comply with such notice requirement.

147) EPA's Response. EPA shall notify NIPSCO in writing regarding NIPSCO's claim of Force Majeure within twenty (20) business days of receipt of the notice provided under Paragraph 144. If EPA agrees that a delay in performance has been or will be caused by a Force Majeure Event, EPA and NIPSCO shall stipulate to an extension of

deadline(s) for performance of the affected compliance requirement(s) by a period equal to the delay actually caused by the event. In such circumstances, an appropriate modification shall be made pursuant to Section XXV (Modification) of this Consent Decree.

148) Disagreement. If EPA does not accept NIPSCO's claim of Force Majeure, or if EPA and NIPSCO cannot agree on the length of the delay actually caused by the Force Majeure Event, the matter shall be resolved in accordance with Section XVIII (Dispute Resolution) of this Consent Decree.

149) Burden of Proof. In any dispute regarding Force Majeure, NIPSCO shall bear the burden of proving that any delay in performance or any other violation of any requirement of this Consent Decree was caused by or will be caused by a Force Majeure Event. NIPSCO shall also bear the burden of proving that NIPSCO gave the notice required by this Section and the burden of proving the anticipated duration and extent of any delay(s) attributable to a Force Majeure Event. An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date.

150) Events Excluded. Unanticipated or increased costs or expenses associated with the performance of NIPSCO's obligations under this Consent Decree shall not constitute a Force Majeure Event.

151) Potential Force Majeure Events. The Parties agree that, depending upon the circumstances related to an event and NIPSCO's response to such circumstances, the kinds of events listed below are among those that could qualify as Force Majeure Events within the meaning of this Section: construction, labor, or equipment delays; failure of PureAir to agree to modify any contract regarding the operation of the FGD on Bailly Units

7 or 8; Malfunction of a Unit or emission control device; acts of God; acts of war or terrorism; and orders by a government official, government agency, other regulatory authority, or a regional transmission organization, acting under and authorized by applicable law, that directs NIPSCO to supply electricity in response to a system-wide (statewide or regional) emergency or to shut down a Unit or Units. Depending upon the circumstances and NIPSCO's response to such circumstances, failure of a permitting authority to issue a necessary permit in a timely fashion may constitute a Force Majeure Event where the failure of the permitting authority to act is beyond the control of NIPSCO and NIPSCO has taken all steps available to it to obtain the necessary permit, including, but not limited to: submitting a complete permit application; responding to requests for additional information by the permitting authority in a timely fashion; and accepting lawful permit terms and conditions after expeditiously exhausting any legal rights to appeal terms and conditions imposed by the permitting authority.

152) As part of the resolution of any matter submitted to this Court under Section XVIII (Dispute Resolution) of this Consent Decree regarding a claim of Force Majeure, Plaintiff and NIPSCO by agreement, or this Court by order, may in appropriate circumstances extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of any delay agreed to by the United States or approved by the Court. NIPSCO shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule (provided that NIPSCO shall not be precluded from making a further claim of Force Majeure with regard to meeting any such extended or modified schedule).

XVII. AFFIRMATIVE DEFENSES

153) Affirmative defense as to stipulated penalties for excess emissions occurring during Malfunctions. If any of NIPSCO's Units exceeds a unit-specific 30-Day Rolling Average Emission Rate, 30-Day Rolling Average Removal Efficiency, or Monthly SO2 Removal Efficiency due to a Malfunction, NIPSCO, bearing the burden of proof, has an affirmative defense to stipulated penalties under this Consent Decree if NIPSCO complies with the reporting requirements of Paragraphs 156, and demonstrates all of the following:

a. the excess emissions were caused by a sudden, unavoidable breakdown of technology, beyond NIPSCO's control;

b. the excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned for, and could not have been avoided by better operation and maintenance practices;

c. to the maximum extent practicable, the air pollution control equipment and processes were maintained and operated in a manner consistent with good practice for minimizing emissions;

d. repairs were made in an expeditious fashion when NIPSCO knew or should have known that the applicable 30-Day Rolling Average Emission Rate, 30-Day Rolling Average Removal Efficiency or Monthly SO2 Removal Efficiency was being or would be exceeded. Off-shift labor and overtime must have been utilized, to the greatest extent practicable, to ensure that such repairs were made as expeditiously as practicable;

e. the amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;

f. all possible steps were taken to minimize the impact of the excess emissions on ambient air quality;

g. all emission monitoring systems were kept in operation if at all possible;

h. NIPSCO's actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence;

i. the excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

j. NIPSCO properly and promptly notified EPA as required by this Consent Decree.

154) Affirmative Defenses as to stipulated penalties for excess emissions occurring during startup or shutdown. If any of NIPSCO's Units exceed a unit-specific 30-Day or 365-Day Rolling Average Emission Rate, 30-Day Rolling Average Removal Efficiency, or Monthly SO2 Removal Efficiency due to startup or shutdown, NIPSCO, bearing the burden of proof, has an affirmative defense to stipulated penalties under this Consent Decree if NIPSCO complies with the reporting requirements of Paragraphs 156, and demonstrates all of the following:

a. The periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful and prudent planning and design;

b. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;

c. If the emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

d. At all times, the facility was operated in a manner consistent with good practice for minimizing emissions;

e. The frequency and duration of operation in startup or shutdown mode was minimized to the maximum extent practicable;

f. All possible steps were taken to minimize the impact of the excess emissions on ambient air quality;

g. All emission monitoring systems were kept in operation if at all possible;

h. NIPSCO's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence; and

i. NIPSCO properly and promptly notified EPA as required by this Consent Decree.

155) If excess emissions occur due to a Malfunction during startup and/or shutdown, then those instances shall be treated as other Malfunctions subject to Paragraph 153.

156) NIPSCO shall provide notice to the United States in writing of NIPSCO's intent to assert an affirmative defense as to stipulated penalties for Malfunction, startup, or shutdown in NIPSCO's semi-annual progress reports as required by Paragraph 127(e).

This notice shall be submitted to EPA pursuant to the provisions of Section XXI (Notices). The notice shall contain:

a. The identity of each stack or other emission point where the excess emissions occurred;

b. The magnitude of the excess emissions expressed in the units of the applicable emissions limitation and the operating data and calculations used in determining the magnitude of the excess emissions;

c. The time and duration or expected duration of the excess emissions;

d. The identity of the equipment from which the excess emissions emanated;

e. The nature and cause of the emissions;

f. The steps taken, if the excess emissions were the result of a Malfunction, to remedy the Malfunction and the steps taken or planned to prevent the recurrence of the Malfunctions;

g. The steps that were or are being taken to limit the excess emissions; and

h. If NIPSCO's permit contains procedures governing source operation during periods of startup, shutdown, or Malfunction and the excess emissions resulted from startup, shutdown, or Malfunction, a list of the steps taken to comply with the permit procedures.

157) A Malfunction, startup, or shutdown shall not constitute a Force Majeure Event unless the Malfunction, startup, or shutdown also meets the definition of a Force Majeure Event, as provided in Section XVI (Force Majeure).

XVIII. DISPUTE RESOLUTION

158) The dispute resolution procedure provided by this Section shall be available to resolve all disputes arising under this Consent Decree, provided that the Party invoking such procedure has first made a good faith attempt to resolve the matter with the other Party.

159) The dispute resolution procedure required herein shall be invoked by one Party giving written notice to the other Party advising of a dispute pursuant to this Section. The notice shall describe the nature of the dispute and shall state the noticing Party's position with regard to such dispute. The Party receiving such a notice shall acknowledge receipt of the notice, and the Parties in dispute shall expeditiously schedule a meeting to discuss the dispute informally not later than fourteen (14) days following receipt of such notice.

160) Disputes submitted to dispute resolution under this Section shall, in the first instance, be the subject of informal negotiations among the disputing Parties. Such period of informal negotiations shall not extend beyond thirty (30) calendar days from the date of the first meeting among the disputing Parties' representatives unless they agree in writing to shorten or extend this period. During the informal negotiations period, the disputing Parties may also submit their dispute to a mutually agreed upon alternative dispute resolution ("ADR") forum if the Parties agree that the ADR activities can be completed within the 30-day informal negotiations period (or such longer period as the Parties may agree to in writing).

161) If the disputing Parties are unable to reach agreement during the informal negotiation period, Plaintiffs shall provide NIPSCO with a written summary of their

position regarding the dispute. The written position provided by Plaintiffs shall be considered binding unless, within forty-five (45) calendar days thereafter, NIPSCO seeks judicial resolution of the dispute by filing a petition with this Court. Plaintiffs may respond to the petition within forty-five (45) calendar days of filing. In their initial filings with the Court under this Paragraph, the disputing Parties shall state their respective positions as to the applicable standard of law for resolving the particular dispute. The Court shall decide all disputes pursuant to applicable principles of law for resolving such disputes.

162) The time periods set out in this Section may be shortened or lengthened upon motion to the Court of one of the Parties to the dispute, explaining the Party's basis for seeking such a scheduling modification.

163) This Court shall not draw any inferences nor establish any presumptions adverse to any disputing Party as a result of invocation of this Section or the disputing Parties' inability to reach agreement.

164) As part of the resolution of any dispute under this Section, in appropriate circumstances the disputing Parties may agree, or this Court may order, an extension or modification of the schedule for the completion of the activities required under this Consent Decree to account for the delay that occurred as a result of dispute resolution. NIPSCO shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule, provided that NIPSCO shall not be precluded from asserting that a Force Majeure Event has caused or may cause a delay in complying with the extended or modified schedule.

XIX. PERMITS AND SIP REVISIONS

165) Unless expressly stated otherwise in this Consent Decree, in any instance where otherwise applicable law or this Consent Decree requires NIPSCO to secure a permit to authorize construction or operation of any device contemplated herein, including all preconstruction, construction, and operating permits required under state law, NIPSCO shall make such application in a timely manner. EPA and the State of Indiana shall use their best efforts to review expeditiously all permit applications submitted by NIPSCO to meet the requirements of this Consent Decree.

166) Notwithstanding the previous paragraphs, nothing in this Consent Decree shall be construed to require NIPSCO to apply for, amend or obtain (1) a PSD or Nonattainment NSR permit or permit modification for any physical change in, or any change in the method of operation of, any NIPSCO System Unit that would give rise to claims resolved by Section XII (Resolution of Claims) of this Consent Decree; or (2) any Title V Permit or other operating permit or permit modification, or application therefore, related to or arising from any physical change in, or change in the method of operation of, any NIPSCO System Unit that would give rise to claims resolved by Section XII (Resolution of Claims) of this Consent Decree.

167) When permits are required as described in Paragraph 165, NIPSCO shall complete and submit applications for such permits to the appropriate authorities to allow time for all legally required processing and review of the permit request, including requests for additional information by the permitting authorities. Any failure by NIPSCO to submit a timely permit application for NIPSCO System Units shall bar any use by NIPSCO of

Section XVI (Force Majeure) of this Consent Decree, where a Force Majeure claim is based on permitting delays.

168) Notwithstanding the reference to Title V permits in this Consent Decree, the enforcement of such permits shall be in accordance with their own terms and the Act. The Title V permits shall not be enforceable under this Consent Decree, although any term or limit established by or under this Consent Decree shall be enforceable under this Consent Decree regardless of whether such term has or will become part of a Title V permit, subject to the terms of Section XXIX (Conditional Termination of Enforcement Under Decree) of this Consent Decree.

169) Within one hundred and eighty (180) days after the Date of Entry of this Consent Decree, NIPSCO shall amend any Title V permit application, or apply for modifications to its Title V permits to include a schedule for implementation of all Annual System Tonnage Limitations, as well as all Unit-specific performance, operational, maintenance, and control technology requirements established by this Consent Decree including, but not limited to, any required 30- or 365-Day Rolling Average Emission Rate or Removal Efficiency and the requirements pertaining to the Surrender of Allowances. Any modifications to the Title V permits or Title V permit applications pursuant to this Paragraph shall include a provision that recognizes that any noncompliance with Annual System Tonnage Limitation requirements constitutes a single violation for the NIPSCO System as a whole and does not create separate violations for each Unit or each facility within the NIPSCO System.

170) Within one (1) year from the Date of Entry of this Consent Decree, NIPSCO shall submit a written request that IDEM amend the Indiana SIP to incorporate all

of the following Consent Decree requirements: performance, operational, maintenance, and control technology requirements; emission rates; removal efficiencies; system-wide Annual Tonnage Limitations; allowance surrenders; limits on use of emission credits; and operation, maintenance and optimization requirements. Such request shall include not only requirements related to particular Units in the NIPSCO System but also those related to the NIPSCO System as a whole.

171) As soon as practicable, but in no event later than ninety (90) days after the Indiana SIP is amended to include the requirements set forth in Paragraph 170 above, NIPSCO shall file a complete application to IDEM to incorporate the requirements of the Indiana SIP, as amended, into the Title V operating permit for each Facility. In making such an application, NIPSCO shall request that the Title V operating permit for each Facility: (i) refer to the section of the amended Indiana SIP that incorporates the system-wide requirements to comply with the Annual System Tonnage Limitation for NOx in Table 4, and the Annual System Tonnage Limitation for SO_2 in Table 6; and (ii) include a provision that recognizes that any noncompliance with any Annual System Tonnage Limitation constitutes a single violation for the NIPSCO System as a whole and does not create separate violations for each Unit or each facility within the NIPSCO System. The requirement to comply with the system-wide Annual System Tonnage Limitations for NOx and SO_2 shall continue to apply after the termination of the Consent Decree.

172) NIPSCO shall provide Plaintiffs with a copy of its request for SIP amendment (as required in Paragraph 170, above) and its applications for Title V Permit modifications (as required in Paragraph 169 and 171, above), as well as a copy of any

permit proposed as a result of such application, to allow for timely participation in any public comment opportunity.

173) If NIPSCO sells or transfers to an entity unrelated to NIPSCO ("Third Party Purchaser") part or all of its Ownership Interest in the NIPSCO System or individual Units, NIPSCO shall comply with the requirements of Section XXII (Sales or Transfers of Ownership Interests) with regard to such Unit or Units prior to any such sale or transfer unless, following any such sale or transfer, NIPSCO remains the holder of the federally enforceable permit for such facility.

XX. INFORMATION COLLECTION AND RETENTION

174) Any authorized representative of the United States, including its attorneys, contractors, and consultants, upon presentation of credentials, shall have a right of entry upon the premises of any facility in the NIPSCO System at any reasonable time for the purpose of:

a. monitoring the progress of activities required under this Consent Decree;

b. verifying any data or information submitted to the United States in accordance with the terms of this Consent Decree;

c. obtaining samples and, upon request, splits of any samples taken by NIPSCO or its representatives, contractors, or consultants; and

d. assessing NIPSCO's compliance with this Consent Decree.

175) NIPSCO shall retain, and instruct its contractors and agents to preserve, all non-identical copies of all records and documents (including records and documents in electronic form) now in its or its contractors' or agents' possession or control, and that directly relate to NIPSCO's performance of its obligations under this Consent Decree for

the following periods: (a) until December 31, 2023, for records concerning physical or operational modifications that are subject to reopener provisions of Section XII, Subsection B of this Consent Decree; and (b) until December 31, 2019, for all other records. This record retention requirement shall apply regardless of any corporate document retention policy to the contrary.

176) All information and documents submitted by NIPSCO pursuant to this Consent Decree shall be subject to any requests under applicable law providing public disclosure of documents unless: (a) the information and documents are subject to legal privileges or protection; or (b) NIPSCO claims and substantiates in accordance with 40 C.F.R. Part 2 that the information and documents contain confidential business information.

177) Nothing in this Consent Decree shall limit the authority of the EPA to conduct tests and inspections at NIPSCO's facilities under section 114 of the Act, 42 U.S.C. § 7414, or any other applicable federal or state laws, regulations or permits.

XXI. NOTICES

178) Unless otherwise provided herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

As to the United States Department of Justice:

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station
Washington, D.C. 20044-7611
DJ# 90-5-2-1-08417

As to EPA:

Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
Ariel Rios Building [2242A]
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

and

George Czerniak
Chief, Air Enforcement and Compliance Assurance Branch
EPA Region 5 (AE-17J)
77 West Jackson St.
Chicago, IL 60604

As to the State of Indiana:

Phil Perry
Indiana Department of Environmental Management
Chief, Air Compliance Branch
100 North Senate Avenue
MC-61-53, IGCN 1003
Indianapolis, IN 46204-2251

As to the Northern Indiana Public Service Company:

Vice President, Operations
NIPSCO
801 East 86th Ave.
Merrillville, IN 46410

and

Chief Legal Officer
NiSource, Inc.
801 East 86th Ave.
Merrillville, IN 46410

179) All notifications, communications or submissions made pursuant to this Section shall be sent either by: (a) overnight mail or overnight delivery service; or (b) certified or registered mail, return receipt requested. All notifications, communications and transmissions sent by overnight, certified or registered mail shall be deemed submitted on the date they are postmarked. If sent by overnight delivery service, they shall be deemed submitted on the date they are delivered to the delivery service.

180) Any Party may change the notice recipient, the address for providing notices or the means of transmittal to it by serving the other Party with a notice setting forth such new notice recipient, such new address or such changed means of transmittal (e.g., to electronic format).

XXII. SALES OR TRANSFERS OF OWNERSHIP INTERESTS

181) If NIPSCO proposes to sell or transfer any Ownership Interest in any System Unit to an entity unrelated to NIPSCO ("Third Party Purchaser"), it shall advise the Third Party Purchaser in writing of the existence of this Consent Decree prior to such sale or transfer, and shall send a copy of such written notification to Plaintiffs pursuant to Section XXI (Notices) of this Consent Decree at least sixty (60) days before such proposed sale or transfer.

182) No sale or transfer of an Ownership Interest shall take place before the Third Party Purchaser and EPA have executed, and the Court has approved, a modification pursuant to Section XXV (Modification) of this Consent Decree making the Third Party Purchaser a party to this Consent Decree and jointly and severally liable with NIPSCO for all the requirements of this Decree that may be applicable to the transferred or purchased Ownership Interests.

183) This Consent Decree shall not be construed to impede the transfer of any Ownership Interests between NIPSCO and any Third Party Purchaser so long as the requirements of this Consent Decree are met. This Consent Decree shall not be construed to prohibit a contractual allocation as between NIPSCO and any Third Party Purchaser of Ownership Interests of the burdens of compliance with this Decree, provided that both NIPSCO and such Third Party Purchaser shall remain jointly and severally liable to EPA for the obligations of the Decree applicable to the transferred or purchased Ownership Interests.

184) If EPA agrees, EPA, NIPSCO, and the Third Party Purchaser that has become a party to this Consent Decree, pursuant to Paragraph 182, may execute a modification that relieves NIPSCO of its liability under this Consent Decree for, and makes the Third Party Purchaser liable for, all obligations and liabilities applicable to the purchased or transferred Ownership Interests. Notwithstanding the foregoing, however, NIPSCO may not assign, and may not be released from, any obligation under this Consent Decree that is not specific to the purchased or transferred Ownership Interests, including the obligations set forth in Sections X (Environmental Mitigation Projects) and XI (Civil Penalty). NIPSCO may propose and EPA may agree to restrict the scope of the joint and several liability of any purchaser or transferee for any obligations of this Consent Decree that are not specific to the transferred or purchased Ownership Interests, to the extent such obligations may be adequately separated in an enforceable manner.

185) Paragraphs 182 and 184 of this Consent Decree does not apply if an Ownership Interest is sold or transferred solely as collateral security in order to consummate a financing arrangement (not including a sale-leaseback), so long as NIPSCO:

(a) remains the operator (as that term is used and interpreted under the Clean Air Act) of the NIPSCO System Units; (b) remains subject to and liable for all obligations and liabilities of this Consent Decree; and (c) supplies Plaintiffs with the following certification within 30 days of the sale or transfer:

> Certification of Change in Ownership Interest Solely for Purpose of Consummating Financing. We, the Chief Executive Officer and General Counsel of the Northern Indiana Public Service Co., jointly certify under Title 18 U.S.C. section 1001, on our own behalf and on behalf of Northern Indiana Public Service Co. ("NIPSCO"), that any change in NIPSCO's Ownership Interest in any Unit that is caused by the sale or transfer as collateral security of such Ownership Interest in such Unit(s) pursuant to the financing agreement consummated on [insert applicable date] between NIPSCO and [insert applicable entity]: (a) is made solely for the purpose of providing collateral security in order to consummate a financing arrangement; (b) does not impair NIPSCO's ability, legally or otherwise, to comply timely with all terms and provisions of the Consent Decree entered in *United States of America v. Northern Indiana Public Service Co.*., Civil Action No. ___________; c) does not affect NIPSCO's operational control of any Unit covered by that Consent Decree in a manner that is inconsistent with NIPSCO's performance of its obligations under the Consent Decree; and d) in no way affects the status of NIPSCO's obligations or liabilities under that Consent Decree.

XXIII. EFFECTIVE DATE

186) The effective date of this Consent Decree shall be the Date of Entry as defined by Paragraph 19. If this Consent Decree is not entered by the Court in the form presented to the Court or the United States or the State of Indiana withhold consent to this Consent Decree before filing, its terms shall be null and void and the Parties shall have no obligation or rights hereunder and the terms of this Consent Decree shall not be used as evidence in any litigation between or among the parties to the Consent Decree.

XXIV. RETENTION OF JURISDICTION

187) The Court shall retain jurisdiction of this case after entry of this Consent Decree to enforce compliance with the terms and conditions of this Consent Decree and to

take any action necessary or appropriate for its interpretation, construction, execution, modification, or adjudication of disputes. During the term of this Consent Decree, any Party to this Consent Decree may apply to the Court for any relief necessary to construe or effectuate this Consent Decree.

XXV. <u>MODIFICATION</u>

188) The terms of this Consent Decree may be modified only by a subsequent written agreement signed by the Plaintiffs and NIPSCO. Where the modification constitutes a material change to any term of this Consent Decree, it shall be effective only upon approval by the Court.

XXVI. <u>GENERAL PROVISIONS</u>

189) This Consent Decree is not a permit. Compliance with the terms of this Consent Decree does not guarantee compliance with all applicable federal, state, or local laws or regulations. The emission rates set forth herein do not relieve Defendant from any obligation to comply with other state and federal requirements under the Clean Air Act, including Defendant's obligation to satisfy any state modeling requirements set forth in the Indiana State Implementation Plan.

190) This Consent Decree does not apply to any claim(s) of alleged criminal liability.

191) In any subsequent administrative or judicial action initiated by Plaintiffs for injunctive relief or civil penalties relating to the facilities covered by this Consent Decree, Defendant shall not assert any defense or claim based upon principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, or claim splitting, or any other defense based upon the contention that the claims raised by Plaintiffs in the

subsequent proceeding were brought, or should have been brought, in the instant case; provided, however, that nothing in this Paragraph is intended to affect the validity of Section XII (Resolution of Claims).

192) Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall relieve Defendant of its obligation to comply with all applicable federal, state, and local laws and regulations. Subject to the provisions in Sections XII (Resolution of Claims), nothing contained in this Consent Decree shall be construed to prevent or limit the rights of Plaintiffs to obtain penalties or injunctive relief under the Act or other federal, state, or local statutes, regulations, or permits.

193) Every term expressly defined by this Consent Decree shall have the meaning given to that term by this Consent Decree and, except as otherwise provided in this Consent Decree, every other term used in this Consent Decree that is also a term under the Act or the regulations implementing the Act shall mean in this Consent Decree what such term means under the Act or those implementing regulations.

194) Nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law (including but not limited to any defenses, entitlements, challenges, or clarifications related to the Credible Evidence Rule, 40 C.F.R. § 52.12(c) (62 Fed. Reg. 8314; Feb. 24, 1997)) concerning the use of data for any purpose under the Act.

195) Each limit and/or other requirement established by or under this Consent Decree is a separate, independent requirement.

196) Performance standards, emissions limits, and other quantitative standards set by or under this Consent Decree must be met to the number of significant digits in which the standard or limit is expressed. For example, an Emission Rate of 0.070

lb/mmBTU is not met if the actual Emission Rate is 0.071 lb/mmBTU. NIPSCO shall round the fourth significant digit to the nearest third significant digit, or the third significant digit to the nearest second significant digit, depending upon whether the limit is expressed to three or two significant digits. For example, if an actual Emission Rate is 0.0704, that shall be reported as 0.070, and shall be in compliance with an Emission Rate of 0.070, and if an actual Emission Rate is 0.0705, that shall be reported as 0.071, and shall not be in compliance with an Emission Rate of 0.070. NIPSCO shall report data to the number of significant digits in which the standard or limit is expressed.

197) This Consent Decree does not limit, enlarge or affect the rights of any Party to this Consent Decree as against any third parties.

198) This Consent Decree constitutes the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Consent Decree, and supercedes all prior agreements and understandings among the Parties related to the subject matter herein. No document, representation, inducement, agreement, understanding, or promise constitutes any part of this Consent Decree or the settlement it represents, nor shall they be used in construing the terms of this Consent Decree.

199) Each Party to this action shall bear its own costs and attorneys' fees.

200) The Parties expressly recognize that whenever this Consent Decree specifies that a 30- Day Rolling Average Emission Rate or a 30-Day Rolling Average Removal Efficiency shall be achieved and/or maintained commencing or starting by or no later than a certain day or date, then compliance with such Rate or Removal Efficiency shall commence immediately upon the date specified, and that compliance as of such

specified date (e.g. December 30) shall be determined based on data from that date and the 29 prior Unit Operating Days (e.g. December 1-29).

201) The Parties expressly recognize that whenever this Consent Decree specifies that a Monthly SO_2 Removal Efficiency shall be achieved and/or maintained at Bailly commencing or starting by or no later than a certain month, then that certain month shall be the first month included in the specified Monthly SO_2 Removal Efficiency (e.g., where the Decree specifies that a 95% Monthly SO_2 Removal Efficiency is to be achieved and maintained no later than January 2011, then January 2011 shall be the first month included in the first Monthly SO_2 Removal Efficiency period, and no day or month prior to January 2011 shall be subject to the Monthly SO_2 Removal Efficiency requirement or included in any calculation to determine compliance with such removal efficiency).

202) The Parties expressly recognize that whenever this Consent Decree specifies that a 365-Day Rolling Average Emission Rate shall be achieved and/or maintained commencing or starting by, on, or no later than a certain day or date, then that certain day or date, if it is an Operating Day, or if it is not an Operating Day then the first Operating Day thereafter, shall be the first day subject to that specified 365-Day Rolling Average Emission Rate (e.g., if the specified 365-Day Rolling Average Emission Rate is to be achieved and maintained from January 1, 2014 through December 31, 2014, and January 1, 2014 is an Operating Day, then January 1, 2014 shall be the first day included in the first 365-Day Rolling Average Emission Rate period, and no day prior to January 1, 2014 shall be subject to that specified 365-Day Rolling Average Emission Rate requirement or included in any calculation to determine compliance with such rate).

XXVII. SIGNATORIES AND SERVICE

203) Each undersigned representative of the Parties certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind to this document the Party he or she represents.

204) This Consent Decree may be signed in counterparts, and such counterpart signature pages shall be given full force and effect.

205) Each Party hereby agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

206) Unless otherwise ordered by the Court, the Plaintiffs agree that the Defendant will not be required to file any answer or other pleading responsive to the Complaint in this matter until and unless the Court expressly declines to enter this Consent Decree, in which case Defendant shall have no less than thirty (30) days after receiving notice of such express declination to file an answer or other pleading in response to the Complaint.

XXVIII. PUBLIC COMMENT

207) The Parties agree and acknowledge that final approval by the United States and entry of this Consent Decree is subject to the procedures of 28 C.F.R. § 50.7, which provides for notice of the lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and the right of the United States to withdraw or withhold consent if the comments disclose facts or considerations which indicate that the Consent Decree is inappropriate, improper or inadequate. Defendant shall not oppose entry of this

Consent Decree by this Court or challenge any provision of this Consent Decree unless the United States or the State of Indiana has notified Defendant, in writing, that the United States or the State of Indiana no longer supports entry of the Consent Decree.

XXIX. CONDITIONAL TERMINATION OF ENFORCEMENT UNDER DECREE

208) Termination as to Completed Tasks. As soon as NIPSCO completes a construction project or any other requirement of this Consent Decree that is not ongoing or recurring, NIPSCO may, by motion to this Court, seek termination of the provision or provisions of this Consent Decree that imposed the requirement.

209) Conditional Termination of Enforcement Through the Consent Decree. After NIPSCO:

a. has successfully completed construction, and has maintained operation, of all pollution controls as required by this Consent Decree;

b. has obtained final permits and SIP revisions that incorporate the requirements of this Consent Decree, as enforceable permit terms or enforceable SIP terms, of all of the Unit performance and other requirements specified in Section XIX (Permits and SIP Revisions) of this Consent Decree; and

c. certifies that the date is later than December 31, 2018, then NIPSCO may so certify these facts to Plaintiffs and this Court. If Plaintiffs do not object in writing with specific reasons within forty-five (45) days of receipt of NIPSCO's certification, then, for any Consent Decree violations that occur after the filing of notice, Plaintiffs shall pursue enforcement of the requirements contained in the Indiana SIP and Title V permit through the

Signature Page for Consent Decree in:

United States of America
v.
Northern Indiana Public Service Co.

FOR THE UNITED STATES OF AMERICA:

Susan Hedman
Regional Administrator
United States Environmental Protection Agency Region 5

Robert A. Kaplan
Regional Counsel
United Stated Environmental Protection Agency Region 5

Louise C. Gross
Associate Regional Counsel
United States Environmental Protection Agency Region 5

Signature Page for Consent Decree in:

United States of America
v.
Northern Indiana Public Service Co.

FOR THE UNITED STATES OF AMERICA:

Cynthia Giles 1/6/11
Cynthia Giles
Assistant Administrator
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency

12/20/10
Phillip A. Brooks
Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency

Seema Kakade
Seema Kakade
Attorney Advisor, Air Enforcement Division
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency

Signature Page for Consent Decree in:

United States of America
v.
Northern Indiana Public Service Co.

FOR THE UNITED STATES OF AMERICA:

David Capp
United States Attorney
Northern District of Indiana

(for)
Wayne T. Ault
Assistant United States Attorney
5400 Federal Plaza, Suite 1500
Hammond, Indiana 46320
Phone: 219-937-5500
Facsimile: 219-937-5547
Email: wayne.ault@usdoj.gov

Signature Page for Consent Decree in:

United States of America
v.
Northern Indiana Public Service Co.

FOR THE UNITED STATES OF AMERICA:

Ignacia S. Moreno
Assistant Attorney General
Environmental and Natural Resources Division
United States Department of Justice

Jerome W. MacLaughlin
Trial Attorney
Environmental Enforcement Section
Environmental and Natural Resources Division
United States Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611
Phone: 202-616-7162
Facsimile: 202-616-2427
Email: jerry.maclaughlin@usdoj.gov

Indiana SIP and applicable Title V permit, and not through this Consent Decree.

210) Resort to Enforcement Under this Consent Decree. Notwithstanding Paragraph 209 above, if enforcement of a provision in this Consent Decree cannot be pursued by a party under the Indiana SIP or applicable Title V permit, or if a Consent Decree requirement was intended to be part of the Indiana SIP or the applicable Title V Permit and did not become or remain part of such SIP or permit, then such requirement may be enforced under the terms of this Consent Decree at any time.

XXX. FINAL JUDGMENT

211) Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment among Plaintiffs and NIPSCO.

SO ORDERED, THIS _____ DAY OF _______________, 20__.

____

HONORABLE __________________

UNITED STATES DISTRICT COURT JUDGE

Signature Page for Consent Decree in:

United States of America
v.
Northern Indiana Public Service Co.

FOR THE STATE OF INDIANA:

FOR THE STATE OF INDIANA,
ON BEHALF OF THE INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Thomas W. Easterly
Commissioner
Indiana Department of Environmental Management

As to form and legality:

Gregory F. Zoeller
Indiana Attorney General

Patricia Orloff Erdmann
Chief Counsel for Litigation
Office of the Attorney General
Indiana Government Center South
5th Floor
302 West Washington Street
Indianapolis, Indiana 46204

APPENDIX A: ENVIRONMENTAL MITIGATION PROJECTS

In compliance with and in addition to the requirements in Section XI of this Consent Decree (Environmental Mitigation Projects), NIPSCO shall comply with the requirements of this Appendix to ensure that the benefits of the $9.5 million in federally directed Environmental Mitigation Projects (Projects) are achieved.

I. Overall Environmental Projects Schedule

A. Within the specified time delineated for each Project, as further described below, NIPSCO shall submit proposed Project plan(s) to EPA for review and approval pursuant to Section XIV of the Consent Decree (Review and Approval of Submittals) for expenditure of the Project Dollars specified in this Appendix in accordance with the deadlines established in this Appendix. EPA shall determine, prior to approval, that all Projects are consistent with federal law.

B. Beginning one hundred and twenty (120) days from the Date of Entry, and continuing annually thereafter until completion of each Project (including any applicable periods of demonstration or testing), NIPSCO shall provide EPA with written reports detailing the progress of each Project, including an accounting of Project Dollars spent to date.

C. All proposed Project plans shall include the following:

1. A plan for implementing the Project;
2. A summary-level budget for the Project;
3. A time-line for implementation of the Project; and
4. A description of the anticipated environmental benefits of the Project, including an estimate of emission reductions (e.g., SO_2 , NOx, PM, CO2) expected to be realized.

D. Upon approval by EPA of the plan(s) required by this Appendix, NIPSCO shall complete the approved Project(s) according to the approved plan(s). Nothing in this Consent Decree shall be interpreted to prohibit NIPSCO from completing the Project(s) ahead of schedule.

E. In accordance with the requirements of Paragraph 114, within 60 days following the completion of each Project, NIPSCO shall submit to EPA for approval a report that documents:

1. The date the Project was completed;
2. The results of implementation of the Project, including the estimated emission reductions or other environmental benefits achieved; and
3. The Project Dollars incurred by NIPSCO in implementing the Project.

II. Environmental Mitigation Projects

A. Clean Diesel Retrofit Project

1. Within 120 day of the Date of Entry, NIPSCO shall propose to EPA for review and approval a plan, in consultation with IDEM, to retrofit in-service diesel engines with emission control equipment further described in this Section, designed to reduce emissions of particulates and/or ozone precursors (the "Clean Diesel Retrofit Project") and to fund the operation and maintenance of the retrofit equipment for the time-period described below. The Project shall include, where necessary, techniques and infrastructure needed to support such retrofits. NIPSCO shall ensure, or direct any third party contractor or partner to ensure, that the recipients operate and maintain the retrofit equipment for five years from the date of installation by providing funding for operation and maintenance as described in Section II.A.2.g, below.

2. In addition to the requirements of Section I. C. of this Appendix, the plan shall also satisfy the following criteria:

a. Involve vehicles based in and equipment located in NIPSCO's service territory in northern Indiana, bordered by the cities of Gary-Hammond, Michigan City, South Bend-Elkhart, and Fort Wayne.

b. Provide for the retrofit of public diesel engines with EPA or California Air Resources Board ("CARB") verified emissions control technologies to achieve the greatest reasonably possible mass reductions of particulates and/or ozone precursors for the fleet(s) that participate(s) in the Clean Diesel Retrofit Project. Depending upon the particular EPA or CARB verified emissions control technology selected, the retrofit diesel engines will be expected to achieve emission reductions of particulates and/or ozone precursors by 30%-90%.

c. Describe the process NIPSCO will use to determine the most appropriate emissions control technology for each particular diesel engine that will achieve the greatest reasonably possible mass reduction of particulates and/or ozone precursors. In making this determination, NIPSCO must take into account the particular operating criteria required for the EPA or CARB verified emissions control technology to achieve the verified emissions reductions.

d. Provide for the retrofit of diesel engines with either: (a) diesel particulate filters (DPF); (b) diesel oxidation catalysts (DOC); or (c) closed crankcase ventilation systems with either DPF or DOC.

e. Describe the process NIPSCO will use to notify fleet operators and owners within the geographic area specified in Section II.A.2.a that their fleet of vehicles may be eligible to participate in the Clean Diesel Retrofit Project and to solicit their interest in participating in the Project.

f. Describe the process and criteria NIPSCO will use to select the particular fleet operator and owner to participate in this Project, consistent with the requirements of this Section.

g. For each of the recipient fleet owners and operators, describe the amount of Project Dollars that will cover the costs associated with: (a) purchasing the verified emissions control technology, (b) installation of the verified emissions control technology (including datalogging), (c) training costs associated with repair and maintenance of the verified emissions control technology (including technology cleaning and proper disposal of waste generated from cleaning), and (d) the incremental costs for repair and maintenance of the retrofit equipment (i.e., DPF, DOC, closed crankcase ventilation system) for five years from the date of installation, including the costs associated with the proper disposal of the waste generated from cleaning the verified emissions control technology. This Project shall not include costs for normal repair or operation of the retrofit diesel fleet. Include a mechanism to ensure that recipients of the retrofit equipment will bind themselves to follow the operating criteria required for the verified emissions control technology to achieve the verified emissions reductions and properly maintain the retrofit equipment installed in connection with the Project for the period beginning on the date the installation is complete through December 31, 2015.

h. Describe the process NIPSCO will use for determining which diesel engines in a particular fleet will be retrofitted with the verified emissions control technology, consistent with the criteria specified in Section II.A.2.b.

i. Ensure that recipient fleet owners and/or operators, or their funders, do not otherwise have a legal obligation to reduce emissions through the retrofit of diesel engines.

j. For any third party with whom NIPSCO might contract to carry out this Project, establish minimum standards that include prior experience in arranging retrofits, and a record of prior ability to interest and organize fleets, school districts, and community groups to join a clean diesel program.

k. Direct the recipient fleet(s) to comply with local, state, and federal requirements for the disposal of the waste generated from the verified emissions control technology and follow CARB's guidance for the proper disposal of such waste, provided however, that NIPSCO shall not be a guarantor of or responsible for the actions or omissions of the recipients.

l. Include a schedule and budget for completing each portion of the Project, including funding for operation and maintenance of the retrofit equipment through December 31, 2015.

3. In addition to the information required to be included in the report pursuant to Section I.C, NIPSCO shall also describe the fleet owner/operator; where it implemented this Project; the particular types of verified emissions control technology (and the number of each type) that it installed pursuant to this Project; the type, year, and horsepower of each vehicle; an estimate of the number of citizens affected (if applicable) by this Project, and the basis for this estimate; and an estimate of the emission reductions for Project or engine, as appropriate (using the manufacturer's estimated reductions for the particular verified emissions control technology), including particulates, hydrocarbons, carbon monoxide, and nitrogen oxides.

B. <u>Wood Stove and Wood Outdoor Boiler Changeout Project</u>

1. Within 120 days of the Date of Entry, NIPSCO shall propose a plan to sponsor a Wood-burning Changeout and Retrofit Project ("Wood Stove/Boiler Changeout and Retrofit Project") that a state or local government agency ("air pollution control agency") or third-party non-profit will agree to implement in an area that would benefit from reductions of fine particle pollution and/or hazardous air pollutants by replacing, or retrofitting or upgrading inefficient, higher polluting wood-burning stoves and outdoor boilers with Energy Star qualified Heat Pumps, EPA Phase 2 hydronic heaters, natural gas boilers of 90% or higher AFUE, natural gas furnaces of 92% or higher AFUE or EPA-certified wood-stoves and/or cleaner burning, more energy-efficient hearth appliances (e.g., wood pellet, gas, or propane stove).

2. Any Wood Stove/Boiler Changeout and Retrofit Project that NIPSCO sponsors shall provide educational information (including, energy efficiency, health and safety benefits, and outreach regarding cleaner-burning alternatives and proper operation of the new technology) and incentives through rebates, discounts, or in some instances, actual replacement of the old technology wood-burning stoves or boilers for income-qualified residential homeowners, to encourage residential homeowners to replace their old, higher polluting and less energy efficient wood stoves or outdoor boilers.

3. NIPSCO shall sponsor the implementation of any Wood Stove/Boiler Changeout and Retrofit Project in NIPSCO's service area(s) in northern Indiana, bordered by the cities of Gary-Hammond, Michigan City, South Bend-Elkhart, and Fort Wayne that promise significant environmental benefit from the Wood Stove/Boiler Changeout and Retrofit Project. The Wood Stove/Boiler Changeout and Retrofit Project shall also include the counties of LaPorte, Lake, and Porter. In determining the specific areas to implement this Project within the aforementioned geographic area, NIPSCO shall give priority to areas with high amounts of air pollution, especially particle pollution and/or hazardous air pollutants, areas located within a geography and topography that makes it susceptible to high levels of particle pollution, or areas that have a significant number of old and/or higher polluting wood-burning stoves or outdoor boilers.

4. The air pollution control agency(ies) and/or non-profit(s) that NIPSCO selects shall consult with EPA's wood smoke team and implement any Wood Stove/Boiler Changeout and Retrofit Project consistent with the materials available on EPA's Burn

Wise website at http://www.epa.gov/burnwise.

5. In addition to the requirements of Section I.C , any plan to implement this Project shall also satisfy the following criteria:

a. Identify the air pollution control agency(ies) and/or non-profit(s) selected to implement the Wood Stove/Boiler Changeout and Retrofit Project.

b. Describe the schedule and budgetary increments in which NIPSCO shall provide the necessary funding to the air pollution control agency(ies) and/or non-profits(s) to implement any Wood Stove/Boiler Changeout and Retrofit Project.

c. Ensure that the air pollution control agency(ies) and/or non-profit(s) will implement any Wood Stove/Boiler Changeout and Retrofit Project in accordance with the requirements of this Appendix, and that the Project Dollars will be used to support the actual replacement, upgrade or retrofit of stoves/boilers currently used as the primary or secondary source of residential heat with a cleaner, more energy efficient stove/boiler (i.e., geothermal heat pump, wood pellet stove, EPA-certified wood stove, gas stove, EPA Phase 2 qualified hydronic heater, natural gas boiler of 90% or higher AFUE, natural gas furnace of 92% or higher AFUE or propane stove). To enable the project to carry on in the future, funds may be used to support changeout/upgrades through revolving loan programs or other low-interest loan programs. NIPSCO shall limit the use of Project Dollars for administrative costs associated with implementation of the program to no greater than 10% of the Project Dollars NIPSCO provides to a specific air pollution control agency and/or non-profit. Up to 7% can be used for personnel cost and the remaining 3 % for other (e.g., outreach materials, training, studies/surveys, travel) project support costs.

d. Describe all of the elements of any Wood Stove/Boiler Changeout and Retrofit Project that the air pollution control agency(ies) and/or nonprofit(s) will implement. NIPSCO shall describe and estimate the number of energy efficient appliances it intends to make available, the cost per unit, and the criteria the air pollution control agency(ies) and/or nonprofit(s) will use to determine which residential homeowners should be eligible for actual stove replacement.

e. If applicable, identify any organizations with which the air pollution control agency(ies) and/or non-profit(s) will partner to implement the Project, including such organizations as: the Hearth, Patio, and Barbecue Association of America, the Chimney Safety Institute of America, a local chapter of the American Lung Association, individual stove retailers, propane dealers, facilities that will dispose of old stoves so that they cannot be resold or reused, housing assistance agencies, local fire departments, local health organizations, and local green energy organizations.

f. Describe how the air pollution control agency(ies) and/or non-profit(s) will ensure that the old and/or higher polluting wood-burningstove/boiler will be properly recycled or disposed.

C. Land Acquisition and Restoration Project in Northwest Indiana

1. Within 45 days from the Date of Entry, NIPSCO shall establish a stakeholder process to solicit input into the funding of land acquisition or restoration Project(s) of lands adjacent to, or near, the Indiana Dunes National Lakeshore, and may include other lands in the northwest Indiana area, potentially affected by emissions form one or more of the NIPSCO Units. The stakeholder process will consist of a maximum of five members and, at minimum, shall include a representative from The Indiana Dunes National Lakeshore, a representative from Indiana Department of Natural Resources, and a representative from an environmental organization such as the Nature Conservancy.

2. The goal of this Project will be the protection through acquisition and/or restoration of ecologically significant land, watersheds, vegetation, and forests within northwest Indiana using adaptive management techniques designed to improve ecosystem health and mitigate harmful effects from air pollution. For purposes of this Appendix and Section XI of this Consent Decree (Environmental Mitigation Projects), land acquisition means purchase or transfer of interests in land, including fee ownership, easements, or other restrictions that run with the land that provide for perpetual protection of the acquired land. The transfer of property or land interests by NIPSCO to any governmental or nongovernmental organization shall be credited at fair market value and must provide for perpetual protection of the land. Restoration may include, by way of illustration, direct reforestation (particularly of tree species that may be affected by acidic deposition) and soil enhancement. Any restoration action must also incorporate the acquisition of an interest in the restored lands sufficient to ensure perpetual protection of the restored land, unless the land restored is already under the ownership of a governmental entity that has a legal duty to conserve the land in perpetuity. Any proposal for acquisition of land must identify fully all owners of the interests in the land. Every proposal for acquisition or transfer of land must identify the ultimate holder of the interests to be acquired and provide a basis for concluding that the proposed holder of title is appropriate for long-term protection of the ecological and/or environmental benefits sought to be achieved through the acquisition.

3. The Project(s) will focus on lands adjacent to, or near, the Indiana Dunes National Lakeshore, and may include other lands in the northwest Indiana area, potentially affected by emissions from one or more of the NIPSCO Units. Examples of Projects include:

a. Acquire and Restore Disturbed Land at NIPSCO Michigan City Plant and Crescent Dune Area: Funding this Project would provide for acquisition, cleanup, invasive species control, and restoration of approximately 246 acres at and around the NIPSCO Michigan City site; and

b. Acquire, Restore, and Donate Land Adjacent to Indiana Dunes National Lakeshore: Funding for this Project would provide for acquisition and restoration of lands adjacent to the National Lakeshore and would include the transfer of title to such lands, or the granting of an easement over such lands, to the National Park Service.

4. Within one year of Date of Entry of this Consent Decree, through the stakeholder process described in II.C.1 above, NIPSCO will identify and provide recommendations for specific Projects to EPA for approval.

D. Funding Obligations for Section II Environmental Projects

1. Within three years of the Date of Entry of this Consent Decree, NIPSCO will have completed the expenditure of a minimum of $3,500,000 to fund and implement the approved Clean Diesel and Wood Stove Changeout Projects as described in II.A and II.B. NIPSCO shall retain the discretion to determine how best to allocate the minimum $3,500,000 in Project Dollars between the approved Clean Diesel and Wood Stove Changeout Projects.

2. Within three years of the Date of Entry of this Consent Decree, NIPSCO will have completed the expenditure of a minimum of $1,500,000 and a maximum of $2,000,000 to fund and implement the approved Land Acquisition and Restoration Project as described in II.C.

III. Additional Environmental Mitigation Projects

A. Within 1 year of the Date of Entry, as further described below, NIPSCO shall submit proposed Project plan(s) to EPA for review and approval pursuant to Section XIV of the Consent Decree (Review and Approval of Submittals) for expenditure of the remaining Project Dollars over a period of not more than five years from the Date of Entry, except as provided below. NIPSCO shall not spend more than $2 million of the remaining Project Dollars on a single project in this Section III "Additional Environmental Mitigation Projects." The Parties agree, subject to the requirements of this Appendix, that NIPSCO may in its discretion decide which of the Projects specified in Sections III.C, and D, of this Appendix to propose for EPA approval. NIPSCO may, at its election, consolidate the plans required by this Appendix into a single plan. In addition, NIPSCO may propose during the five year period to make amendments or modifications to the plan or plans for EPA review and approval. NIPSCO has no current obligation to undertake any of the Projects described below in Sections III.C, D, and E.

B. The Parties agree that NIPSCO is entitled to spread its payments for Projects over the five-year period commencing upon the Date of Entry. NIPSCO is not, however, precluded from accelerating payments to better effectuate a proposed mitigation plan, provided that NIPSCO shall not be entitled to any reduction in the nominal amount of the required payments by virtue of the early expenditures. EPA shall determine prior to approval that all Projects are consistent with federal law.

C. Hybrid Fleet Project

1. NIPSCO may elect to submit a plan for a hybrid and/or electric fleet project to reduce emissions from NIPSCO's fleet of motor vehicles. NIPSCO has a substantial fleet of motor vehicles where it operates. These motor vehicles are generally powered by conventional diesel or gasoline engines and include vehicles such as diesel "bucket" trucks. The use of hybrid engine technologies in NIPSCO's motor vehicles, such as diesel-electric engines, will improve fuel efficiency and reduce emissions of NO_x, PM, VOCs, and other air pollutants.

2. As part of any plan for the Hybrid Fleet Project, assuming that NIPSCO elects to undertake this Project, NIPSCO may elect to spend Project Dollars on the replacement of conventional motor vehicles in its fleet with newly manufactured hybrid and/or electric vehicles.

3. In addition to the requirements of Section I.C of this Appendix, any plan for the Hybrid Fleet Project shall:

a. Propose the replacement of convention diesel engines in bucket trucks or other mobile sources with hybrid or electric engines, and/or propose the replacement of portions of NIPSCO's fleet (including cars, vans, and pickup trucks) with hybrid and/or electric vehicles. For purposes of this subsection of this Appendix, "hybrid and/or electric vehicle" means a vehicle that can generate and/or utilize electric power to reduce the vehicles consumption of diesel or gasoline fuel. Any such vehicle proposed for inclusion in the Hybrid Fleet Project shall meet all applicable engine standards, certifications, and/or verifications.

b. Propose a method to account for the amount of Project Dollars that will be credited for each replacement made under subparagraph (a) above, taking into account the incremental cost of such engines or vehicles as compared to conventional engines or vehicles and potential savings associated with the replacement;

c. Prioritize the replacement of diesel-powered vehicles in NIPSCO's fleet. Certify that NIPSCO will use the Hybrid Vehicles for their useful life (as defined in the proposed Plan).

4. Notwithstanding any other provision of this Consent Decree, including this Appendix, NIPSCO shall only receive credit toward Project Dollars for the incremental cost of hybrid and/or electric vehicles as compared to the cost of a newly manufactured, similar motor vehicle powered by conventional diesel or gasoline engines.

D. Electric Vehicle Infrastructure Enhancement

1. NIPSCO may undertake enhancements to the electric vehicle charging infrastructure by funding creation of one or more charging stations for electric vehicles in the Northwest Indiana area bordered by the cities of Gary-Hammond, Michigan City, South Bend-Elkhart, and Fort Wayne. Battery powered and some hybrid vehicles need plug-in infrastructure to recharge the batteries. Establishment of electric vehicle charging stations in Northwest Indiana could expand the useful driving range of electric vehicles in the Chicago metropolitan area as well as encourage Northwest Indiana drivers to purchase electric vehicles for local use as well as commutes to Chicago. Locations for such charging stations would be targeted for areas where vehicles could be left for several hours to fully charge the electric vehicle's battery system.

2. If NIPSCO elects to undertake this Project, it may partner with third party organizations (e.g., NIRPC, SSCC) to handle funding and selection of locations in Northwest Indiana. Locations would be sought to maximize the number of vehicles that could utilize the chargers while striving to expand into Northwest Indiana the network of electric vehicle charging stations currently in the Illinois portion of the greater Chicago metropolitan area. Potential sites could consist of locations that provide public access, including parking lots at mass transit terminals/stops (such as South Shore Commuter Rail stations, RDA bus stops), large industrial facilities or similar employers (NIPSCO, Methodist Hospital, steel mills), residences, and and shopping malls in Lake and Porter counties.

3. Emission reductions - overall emissions reductions would depend upon the number of vehicles utilizing the facilities and would be based upon the type of vehicle the electric vehicle replaces in the general geographic area, the emissions characteristics and the annual vehicle miles traveled (VMT). For the term of this project NIPSCO would commit to effectively supply the vehicle charging station with zero emission renewable energy sources through the use of renewable energy credits (RECs). Therefore the usage would be considered emission free. NIPSCO will report the expected and achieved environmental benefits.

4. NIPSCO may consider and implement additional options to enhance electric vehicle usage, such as to:

a. Provide a purchase incentive for acquisition of plug-in hybrid electric vehicle (PHEV), pure battery electric vehicle (EV), or lesser incentive to a conventional vehicle converted to a plug-in

b. Fund low-interest loans through banks and dealers for plug-in vehicles

c. Provide direct cash incentives to consumers for vehicle purchase.

E. Residential and Commercial Electric to Natural Gas Conversion Project

1. NIPSCO may submit a plan to EPA to implement a Residential and Commercial Electric to Natural Gas Conversion Project ("Conversion Project") to reduce life cycle SO_2, NOx, and PM and other air emissions resulting from residential and commercial space and water heating energy usage. If NIPSCO elects to perform this Conversion Project, the Conversion Project will consist of specific measures that will produce long-term, permanent, environmental benefits by the removal and replacement of electric resistance furnaces and water heaters with new high efficiency natural gas furnaces (92% or higher AFUE) and natural gas water heaters. The reduction in emissions of SO_2 , NOx, PM, and other air emissions would occur based on the more efficient energy delivery by natural gas compared to electricity (approximately 92% delivery efficiency for natural gas versus 32% delivery efficiency for electricity) and the use of inherently cleaner burning natural gas compared to the overall predominance of coal based fuels in this subregion. The Conversion Project will be performed in and demonstrate SO_2 , NOx, PM and other air emission benefits to communities in northern Indiana, bordered by the cities of Gary-Hammond, Michigan City, South Bend-Elkhart, and Fort Wayne area and provide benefits beyond what is required of NIPSCO under any Indiana Utility Regulatory Commission state-wide mandate.

2. If NIPSCO elects to undertake this Conversion Project, it may partner with third party organizations to handle funding and selection of residences and commercial establishments for the removal of electric resistance furnaces and water heaters and replacement with natural gas-fired units.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document (TSD)
for a Part 70 Operating Permit Renewal

Source Description and Location

Source Name:	Northern Indiana Public Service Company - Michigan City Generating Station
Source Location:	101 Wabash Street, Michigan City, IN 46360
County:	LaPorte
SIC Code:	4911
Permit Renewal No.:	T 091-29806-00021
Permit Reviewer:	Heath Hartley

Public Notice Information

On September 5, 2012, the Office of Air Quality (OAQ) had a notice published in News Dispatch in Michigan City, Indiana, stating that the Northern Indiana Public Service Company - Michigan City Generating Station had applied for a Part 70 Operating Permit Renewal. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments Received

OAQ received comments from the following people (and groups of people):

- Northern Indiana Public Service Company - Michigan City Generating Station The comments are summarized in the subsequent pages, with IDEM's corresponding responses.

The IDEM does not amend the Technical Support Document (TSD). The TSD is maintained to document the original review. This addendum to the TSD is used to document comments, responses to comments and changes made from the time the permit was drafted until a final decision is made.

NIPSCO Comments and IDEM's Responses

On October 5, 2012, OAQ received comments from Northern Indiana Public Service Company - Michigan City Generating Station. The summary of the comments and IDEM, OAQ responses, including changes to the permit (language deleted is shown in ~~strikeout~~ and language added is shown in **bold**) are as follows:

Company Comment 1:

In order to maintain consistency with the numbering of the original Title V permit, subsections of Sections B & C were either relocated or renumbered, we suggest the following changes to the Table of Contents to reflect the changes in the location and numbering in those sections of the permit.

The name for section B.20 should be moved to B.17. In order to make room for moved name, the name for sections B.17 through B.19 should be moved to B.18 through B.20 by adjusting numbering of sections B.17 to B.18, B.18 to B.19, B.19 to B.20. Sections from B.21 to end are ok.

IDEM Response 1: The table of contents has been corrected to match the permit conditions.

Company Comment 2:

Section D.2.6a is numbered inconsistently when compared with the NIPSCO Michigan City and Bailly and draft Schahfer Generating Station Title V permits. This section, titled Continuous Opacity Monitoring, falls underneath the Testing Requirements section of those aforementioned permits. Therefore, since Testing Requirements is Section D.2.4 in the Michigan City permit, we believe that Section D.2.6a should be moved and renumbered as D.2.4.1.

IDEM Response 2: Previous condition D.2.6a has been moved and renumbered to D.2.4.1.

D.2.~~6a~~**4.1** Continuous Opacity Monitoring [326 IAC 3-5][40 CFR Part 75] [40 CFR 64]

(a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), the Permittee shall install calibrate, certify, operate, and maintain all necessary continuous opacity monitoring systems (COMS) and related equipment for measuring opacity, which meet all applicable performance specifications of 326 IAC 3-5-2. 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 time and reason of the breakdown and efforts made to correct the problem.

(~~e~~**d**) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a COMS pursuant to 326 IAC 3-5, 40 CFR 60 and/or 40 CFR 63.

Company Comment 3:

Boilers 4, 5 and 6 were recently decommissioned. Most of the descriptive language in the permit concerning those units has been removed from the permit. In order to complete the removal from the permit, please also delete the Emissions Unit Description (a) from Section E.

IDEM Response 3: Boilers 4, 5, & 6 have been removed from Section E.

SECTION E ACID RAIN PROGRAM CONDITIONS

Emission Unit Description:

(a) ~~Three (3) natural gas-fired boilers, identified as Boiler 4, Boiler 5, and Boiler 6, each with a design heat input capacity of 482 million Btu per hour (MMBtu/hr), exhausting to Stack 1, Stack 2, and Stack 3, respectively, each with a continuous emissions monitoring system (CEMS) for nitrogen oxides~~ ~~(NO_x). Installation of Boilers 4 and 5 was completed in 1950 and installation of Boiler 6 was completed in 1951.~~

~~(b)~~ One (1) cyclone coal-fired boiler, identified as Boiler 12, with a design heat input capacity of 4650 million Btu per hour (MMBtu/hr), with construction completed in May 1974, with an electrostatic precipitator (ESP) with a flue gas conditioning (FGC) system for control of particulate matter, exhausting to Stack 4. Natural gas can be fired during startup, shutdown, and malfunctions. Boiler 12 has a selective catalytic reduction (SCR) system for NO_X control, and has continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system.

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

Company Comment 4:

In the original Title V permit application for Michigan City, a Detroit Diesel 357 hp compression ignition emergency engine for a fire pump was included in the Title V permit application through a check box for insignificant activities. However, it did not get included in the Title V list of insignificant activities in the original permit and is currently not included in this renewal version of the permit. We propose that IDEM add it to the list of insignificant activities as A.3(l). In addition, since 40 CFR Part 63, Subpart ZZZZ regulation is applicable; the engine should be also be included in a new Section H.3 of the Title V permit as well. IDEM permit forms FED-01, PI-02C and PI-02F have been attached with these comments to help incorporate the engine into the permit.

IDEM Response 4: The addition of this insignificant activity and requirements of 40 CFR Part 63, Subpart ZZZZ must go through a public notice review period. Therefore, this emergency engine cannot be included in the permit at this time. This engine will be added to the permit through Significant Permit Modification 091-32424-00021.

Company Comment 5:

Upon further review of 40 CFR Part 60, Subpart Db, NIPSCO would like to update the rule citations for Section H.1 of the permit. Please change in H.1.2(1) from 40 CFR 60.40b to 40 CFR 60.40b(a) & (j), in H.1.2(4) 40 CFR 60.44b to 40 CFR 60.44b(a)(1), (h) & (i).

IDEM Response 5: This clarifications have been made.

H.1.2 Industrial-Commercial-Institutional Steam Generating Units NSPS Requirements [40 CFR 60, Subpart Db] [326 IAC 12]

Pursuant to 40 CFR 60 Subpart Db, the Permittee shall comply with the provisions of 40 CFR 60 Subpart Db, which are incorporated as 326 IAC 12-1 for auxiliary boiler AUX 1, as specified as follows:

(1) 40 CFR 60.40b**(a) & (j)**
(2) 40 CFR 60.41b
(3) 40 CFR 60.42b
(4) 40 CFR 60.44b**(a)(1), (h) & (i)**
(5) 40 CFR 60.45b
(6) 40 CFR 60.46b
(7) 40 CFR 60.48b
(8) 40 CFR 60.49b

Company Comment 6:

Upon further review of 40 CFR Part 60, Subpart Y, NIPSCO would like to update the rule citations for Section H.2 of the permit. Please change H.2.2(1) from 40 CFR 60.250 to 40 CFR 60.250(a) & (c). Additionally, for the test methods section of H.2.2(4), please change it to include the entire 60.257 reference [remove the (a)(1) referernce].

IDEM Response 6: the clarification has been made for H.2.2.

H.2.2 New Source Performance Standards (NSPS) for Coal Preparation Plants
[40 CFR Part 60, Subpart Y] [326 IAC 12]

Pursuant to 40 CFR 60 Subpart Y, the Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Y, which are incorporated by reference as 326 IAC 12, as specified as follows:

(1) 40 CFR 60.250**(a)&(c)**
(2) 40 CFR 60.251
(3) 40 CFR 60.254(b)(1)&(2)
(4) 40 CFR 60.255(b)(1)&(2)
(5) 40 CFR 60.257~~(a)(1)~~
(6) 40 CFR 60.258(a)(1) through (3), (d)

Other Changes

The summary of the comments and IDEM, OAQ responses, including changes to the permit (language deleted is shown in ~~strikeout~~ and language added is shown in **bold**) are as follows:

Change 1: The "Effective Date" has been removed from the permit cover page.

Operation Permit No.: T 091-29806-00021	
Issued by: Tripurari P. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: ~~Effective Date:~~ Expiration Date:

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IDEM Contact

Questions regarding this proposed permit can be directed to Heath Hartley at the Indiana Department Environmental Management, Office of Air Quality, MC 61-53, Room 1003, 100 North Senate Avenue, Indianapolis, Indiana 46204-2251 or by telephone at (317) 232-8217 or toll free at 1-800-451-6027 extension 2-8217.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

Source Background and Description

Source Name: Northern Indiana Public Service Company - Michigan City Generating Station
Source Location: 101 Wabash Street, Michigan City, IN 46360
County: LaPorte
SIC Code: 4911
Permit Renewal No.: T 091-29806-00021
Permit Reviewer: Heath Hartley

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Northern Indiana Public Service Company - Michigan City Generating Station relating to the operation of a stationary electric utility generating station. On October 19, 2010, Northern Indiana Public Service Company - Michigan City Generating Station submitted an application to the OAQ requesting to renew its operating permit. Northern Indiana Public Service Company - Michigan City Generating Station was issued its Part 70 Operating Permit T 091-6637-00021 on July 18, 2006.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

(a) One (1) cyclone coal-fired boiler, identified as Boiler 12, with a design heat input capacity of 4650 million Btu per hour (MMBtu/hr), with construction completed in May 1974, with an electrostatic precipitator (ESP) with a flue gas conditioning (FGC) system for control of particulate matter, exhausting to Stack 4. Natural gas can be fired during startup, shutdown, and malfunctions. Boiler 12 has a selective catalytic reduction (SCR) system for NO_X control, and has continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_X) and for sulfur dioxide (SO_2) and a continuous opacity monitoring (COM) system.

(c) One (1) natural gas-fired auxiliary boiler, identified as AUX1, rated at 109 million Btu per hour (MMBtu/hr), installed in 2003, equipped with low NO_X burners, exhausting to Stack AUX1, with a continuous emissions monitoring system (CEMS) for nitrogen oxides (NO_X).

(d) A coal storage and handling system for Boiler 12, completed before May 1974.

(1) One (1) railcar unloading station with particulate emissions controlled by wet suppression and partial enclosure, with a maximum throughput of 1500 tons of coal per hour.

(2) An enclosed conveyor system to the coal storage pile(s), with the transfer points underground or enclosed by buildings. A telescoping chute is used to drop coal to the storage pile(s).

(3) Coal storage pile(s) and coal pile reclaim, with fugitive dust emissions controlled by compaction and wet suppression.

(4) Coal conveyors and the coal junction house, with carryover wet suppression, additional wet suppression and/or foam application, and enclosed transfer points.

(5) One coal conveyor, constructed in 1974 and reconstructed in 2009, identified as C08, with a maximum capacity of 1000 tons per hour, using carryover wet suppression. [40 CFR 60, Subpart Y]

(6) Coal crusher house, with a baghouse, identified as CHDC, for particle control, with carryover wet suppression for particulate control and enclosed transfer points within an enclosure for ancillary dust control with a maximum primary throughput of 400 tons of coal per hour and maximum secondary throughput of 1000 tons/hour .

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(7) Coal sample house/breaker building with a baghouse, identified as SHDC, for PM control, with carryover wet suppression for PM control and enclosed transfer points within an enclosure for ancillary dust control.

(8) Coal tripper floor to coal bunkers, with a baghouse, identified as TFDC, for PM control, with enclosure for ancillary dust control.

(e) Dry fly ash handling, installed in 1997, including the following:

(1) Vacuum conveyance of fly ash to a storage silo with particulate emissions controlled by a bin vent filter, with a design throughput rate of 9.3 tons per hour.

(2) One (1) enclosed fly ash silo unloading station with a design unloading capacity of 200+ tons per hour, used to load dry fly ash to covered trucks, with particulate emissions controlled by the use of a telescoping chute with a vacuum system and a bin vent filter. Overhead doors with an interlock system are closed when ash trucks are being loaded.

(f) Wet process bottom ash handling installed in approximately 1950, with bottom ash sluiced to storage pond(s), with water cover or vegetation sufficient to prevent ash re-entrainment. Ash removed from the pond(s) is stored in piles before being taken offsite by truck.

Insignificant Activities

The source also consists of the following insignificant activities:

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

(1) One (1) 480,000 BTU boiler in the "A" Building, installed in 1970 [326 IAC 6-2];

(2) One (1) 480,000 BTU boiler in the Gate House, installed in 1964, [326 IAC 6-2];

(3) One (1) 297,000 BTU boiler, installed in 1953 in the Relay House (Substation Bldg. #G15), each used for building heat. [326 IAC 6-2]

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

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

(d) 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 (100°F) or;

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

(e) Conveyors as follows: Underground conveyors. [326 IAC 6-3]

(f) Coal bunker and coal scale exhausts and associated dust collector vents. [326 IAC 6-3]

(g) 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]

(h) Vents from ash transport systems not operated at positive pressure. [326 IAC 6-3]

(i) Source-wide paved and unpaved roads (vehicle traffic) and parking lots with public access. [326 IAC 6-4]

(j) Coal pile wind erosion. [326 IAC 6-4]

(k) Ponded bottom ash handling and removal. [326 IAC 6-4]

(l) 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, SO_2 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) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour.

    (2) Combustion source flame safety purging on startup.

    (3) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons. Tank 1, installed in 1979, with a capacity of 1,500 gallons.

    (4) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.

    (5) Two (2) diesel fuel tanks, installed prior to 1973, with a combined capacity of 8,000 gallons.

    (6) The following VOC and HAP storage containers:

        (A) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.

        (B) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.

    (7) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.

    (8) Machining where an aqueous cutting coolant continuously floods the machining interface.

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

(10) Cleaners and solvents characterized as follows:

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

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

(11) Closed loop heating and cooling systems.

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

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

(B) Using 80 tons or less of welding consumables.

(13) Solvent recycling systems with batch capacity less than or equal to 100 gallons.

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

(15) Activities associated with the transportation and treatment of sanitary sewage, provided discharge to the treatment plant is under the control of the owner/operator, that is, an onsite sewage treatment facility.

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

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

(18) Noncontact cooling tower systems with natural draft cooling towers not regulated under a NESHAP.

(19) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(20) Heat exchanger cleaning and repair.

(21) Process vessel degassing and cleaning to prepare for internal repairs.

(22) Stockpiled soils from soil remediation activities that are covered and waiting transportation for disposal.

(23) Asbestos abatement projects regulated by 326 IAC 14-10.

(24) Purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.

(25) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

(26) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(27) Other emergency equipment as follows: One (1) stationary fire pump (diesel-fired).

(28) Purge double block and bleed valves.

(29) Filter or coalescer media changeout.

(30) A laboratory as defined in 326 IAC 2-7-1(21)(D).

(31) Evaporation of boiler chemical cleaning liquids.

Existing Approvals

Since the issuance of the Part 70 Operating Permit T 091-6637-00021 on July 18, 2006, the source has constructed or has been operating under the following additional approvals:

(a) Acid Rain Renewal No. 091-19670-00021 issued on August 8, 2006;
(b) Appeal Resolution No. 091-23550-00021 issued on May 13, 2008;
(c) CAIR No. 091-26395-00021 issued on July 1, 2009; and
(b) Significant Permit Modification No. 091-27522-00021 issued on April 14, 2009.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the State Implementation Plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

The following changes have been made:

- Boiler 4, Boiler 5 and Boiler 6 have been removed from the source.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in LaPorte County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Attainment effective July 19, 2007, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
$PM_{2.5}$	Unclassifiable or attainment effective April 5, 2005
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.
[1]Unclassifiable or attainment effective November 15, 1990, for the 1-hour standard which was revoked effective June 15, 2005.	

(a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. LaPorte County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
LaPorte County has been classified as attainment for $PM_{2.5}$. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for $PM_{2.5}$ emissions. These rules became effective on July 15, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM_{10} emissions as a surrogate for $PM_{2.5}$ emissions until 326 IAC 2-2 is revised.

(c) Other Criteria Pollutants
LaPorte County has been classified as attainment or unclassifiable in Indiana for SO_2, CO, PM_{10}, NO_2, Pb. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this source is classified as a fossil fuel fired steam electric plants of more than two hundred fifty million (250,000,000) British thermal units per hour heat input, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7. Therefore, fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Unrestricted Potential Emissions

The numbers reported in the unrestricted potential emissions table of this TSD are based on certain assumptions and do not reflect the maximum allowable emissions from the plant. Accordingly, the information included in said tables, do not constitute enforceable conditions, and is not to be relied on in evaluating actual or allowable emissions from the plant.

Unrestricted Potential Emissions	
Pollutant	Tons/year
PM	23,582
*PM_{10}	3,327
$PM_{2.5}$	3,288
SO_2	98,503
VOC	49
CO	503
NO_x	30,619
GHGs as CO2e	4,847,632
Pb	0.4
HCl	1,111
Total HAP	1,257

negl. = negligible

*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM_{10}, SO_2, NOx and CO are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7 and will be issued a Part 70 Operating Permit Renewal.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

Actual Emissions

The following table shows the actual emissions as reported by the source. This information reflects the 2009 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	Not Reported
PM_{10}	687
SO_2	9,430
VOC	64
CO	301
NO_x	1,098
Lead	0.49

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, because the source met the following:

(a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

(b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Potential to Emit After Issuance

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

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)										
	PM	PM_{10}	$PM_{2.5}$	SO_2	NOx	VOC	CO	GHGs	Pb	Worst Single HAP	Total HAPs
Unit 12	4,888	2,997	2,997	98,502	30,551	46	463	4,789,328	0.4	1,111 HCl	1,256
Boiler AUX 1	1	4	4	0	< 40	3	40	665	0	0	1
Insignificant boilers	0	0	0	0	2	0	0	0	0	0	
Material Handling	529	326	287	0	0	0	0	0	0	0	0
Total PTE of Entire Source	5,418	3,327	3,288	98,503	32,365	49	503	4,847,632	0.4	1,111	1,257
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000 CO_2e	10	10	25
PSD Major Source Thresholds	100	100	100	100	100	100	100	100,000 CO_2e	NA	NA	NA

Note: The numbers reported in the Potential to Emit Table above are based on certain assumptions and therefore, does not reflect the maximum allowable emissions from the plant. Accordingly, the information included in the Table, does not constitute enforceable conditions, and is not to be relied on in evaluating actual or allowable emissions from the plant.

This existing stationary source is major for PSD because the emissions of at least one regulated pollutant are greater than one hundred (>100) tons per year, and it is in one of the twenty-eight (28) listed source categories.

Federal Rule Applicability

(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each existing pollutant-specific emission unit that meets the following criteria:

(1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant; and

(3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each existing emission unit and specified pollutant subject to CAM:

Emission Unit / Pollutant	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
Boiler 12 / PM_{10}	ESP	N	2,997	15	100	N	-
Boiler 12 / PM	ESP	Y	23,052	115	100	Y	Y
Boiler 12 / NOx	SCR	N	30,551	30,551	100	N	-
Boiler 12 / SO2	None	Y	98,502	98.502	100	N	-
Boiler 12 / CO	None	N	463	463	100	N	-
Boiler 12 / HCl	None	N	1,111	1,111	100	N	-

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to Boiler 12 for PM. The Compliance Determination and Monitoring Requirements section includes a detailed description of the CAM requirements.

NSPS

(b) The requirements of the New Source Performance Standard, 326 IAC 12, Standards of Performance for Fossil-Fuel-Fired Steam Generators and Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units (40 CFR 60 Subparts D, Db, and Dc), are not included in the permit for Boiler 12. Construction of each of this boiler commenced before August 17,1971. A construction permit application for Boiler 12 was received by the Air Pollution Control Division of the Indiana State Board of Health on April 27, 1971. For purposes of NSPS applicability, construction is determined to have commenced some time prior to that date, when the unit was ordered.

(c) The auxiliary boiler AUX1 is subject to the requirements of the New Source Performance Standard, 40 CFR 60 Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, because construction commenced in 2002 when the unit was ordered, and the heat input capacity is 109 million Btu/hour.
AUX 1 is applicable to the following portions of 40 CFR 60 Subpart Db:

(1) 40 CFR 60.40b
(2) 40 CFR 60.41b
(3) 40 CFR 60.42b
(4) 40 CFR 60.44b
(5) 40 CFR 60.45b
(6) 40 CFR 60.46b
(7) 40 CFR 60.48b
(8) 40 CFR 60.49b

(d) The reconstructed conveyor will be subject to the New Source Performance Standards for Coal Preparation Plants 40 CFR 60, Subpart Y, which is incorporated by reference as 326 IAC 12, because it is coal processing and conveying equipment with a capacity greater than 200 tons per day and is being modified after October 24, 1974. Nonapplicable portions of the NSPS will not be included in the permit.
The reconstructed conveyor is subject to the following portions of 40 CFR 60, Subpart Y:

(1) 40 CFR 60.250

(2) 40 CFR 60.251
(3) 40 CFR 60.254(b)(1)&(2)
(4) 40 CFR 60.255(b)(1)&(2)
(5) 40 CFR 60.257(a)(1)
(6) 40 CFR 60.258(a)(1) through (3), (d)

(e) Gasoline tank 1 is not subject to the requirements of the New Source Performance Standard 40 CFR 60, Subpart K because it was constructed after May 19, 1978. It is not subject to 40 CFR 60 Subpart Ka because the storage capacity is less than 40,000 gallons. 40 CFR 60, Subpart K is not applicable for the two (2) diesel tanks because these tanks were installed prior to June 1973. In addition, Subparts K and Ka specifically exempt Nos. 2 through 6 fuel oils from the definition of Petroleum Liquids.

NESHAP

(g) Acid Rain Program
Boiler 12 at this source is subject to the requirements of 40 CFR Part 72 through 40 CFR Part 80 (Acid Rain Program).

(h) Clean Air Interstate Rule (CAIR)
Boiler 12 is subject to the Clean Air Interstate Rule (CAIR) Nitrogen Oxides Annual, Sulfur Dioxide, and Nitrogen Oxides Ozone Season Trading Programs – CAIR Permit for CAIR Units under 40 CFR 97.

State Rule Applicability - Entire Source

326 IAC 1-5-2 Emergency Reduction Plans
The source is subject to 326 IAC 1-5-2.

326 IAC 2-2 Prevention of Significant Deterioration
The NO_X emissions from the auxiliary boiler (AUX1) shall be less than 40 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit shall render the requirements of Major New Source Review not applicable to the auxiliary boiler (AUX1).

326 IAC 2-6 Emission Reporting
This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit pursuant to 326 IAC 2-7 (Part 70). The potential to emit of PM_{10} is greater than 250 tons per year, and the potential to emit of NOx and SO_2 is greater than 2,500 tons per year. Therefore, pursuant to 326 IAC 2-6-3(a)(1), annual reporting is required. An emission statement shall be submitted by July 1, 2011, and every year thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 5-1 Opacity Limitations
This source is subject to the opacity limitations specified in 326 IAC 5-1-2(1).

State Rule Applicability – Individual Facilities

326 IAC 2-4.1 Hazardous Air Pollutants
The operation of Boiler AUX1 was constructed after July 27, 1997, however it emits less than 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 3-5 Continuous Monitoring of Emissions
Unit AUX1 are subject to the requirements of 326 IAC 3-5 because they are fossil fuel-fired steam generators of greater than 100 MMBtu per hour heat input capacity.

326 IAC 6-2 Particulate Emission Limitations for Sources of Indirect Heating

(a)

(b) Pursuant to 326 IAC 6-2-3 the PM emissions from the "A" Building boiler, the Gate House boiler, and the Relay House boiler shall not exceed 0.27 pound per million Btu heat input (lb/MMBtu). This limitation was calculated using the following equation:

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

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 maxoperating capacity rating in (MMBtu/hr) heat input. (1447.257)
N = Number of stacks in fuel burning operation. (6)
a = 0.8, for Q greater than 1,000 MMBtu/hr heat input.
h = Stack height in feet (190)

Pursuant to 326 IAC 6-2-3(b), the emission limitations for those indirect heating facilities which were existing and in operation on or before June 8, 1972, shall be calculated using the above equation where Q, N, and h include the parameters for all facilities in operation on June 8, 1972. The resulting Pt is the emission limitation for each facility existing on that date and will not be affected by the addition of any subsequent facility. For these units, Q = 1447.257 MMBtu/hr. 3 x 482 MMBtu/hr (Boilers 4, 5, and 6) + 0.48 MMBtu/hr (“A” Building) + 0.48 MMBtu/hr (Gate House) + 0.297 MMBtu/hr (Relay House (Substation Bldg. #G15)).

(c) Pursuant to 326 IAC 6-2-3, the PM emissions from Boiler 12 shall not exceed 0.24 pound per million Btu heat input (lb/MMBtu). This limitation was calculated using the following equation:

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

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 (MMBtu/hr) heat input.
N = Number of stacks in fuel burning operation. (4)
a = 0.8, for Q greater than 1,000 MMBtu/hr heat input.
h = Stack height in feet = 448 ft. (determined from original TV application)

For Boiler 12: 3 x 482 MMBtu/hr (Boilers 4, 5, and 6) + 4650 MMBtu/hr (Boiler 12) + 0.48 MMBtu/hr (“A” Building) + 0.48 MMBtu/hr (Gate House) + 0.297 MMBtu/hr (Relay House (Substation Bldg. #G15)) = 6097.257 MMBtu/hr.

(d) Pursuant to IAC 6-2-4, the particulate emissions from boiler AUX1 shall be limited to 0.113 pound per million British thermal units heat input. This limitation is based on the following equation:

$Pt = 1.09/Q^{0.26}$

where: Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input
Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. (6097.257 + 109 = 6206.257)

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

(a) Pursuant to 326 IAC 6-3-2, the particulate emission rate shall not exceed the limits shown in the following table:

Emission Unit	Process Weight Rate (tons/hr)	Particulate Emissions Limit (lb/hr)
DP1	1500	83.0

DP2	1500	83.0
DP3	1500	83.0
DP4	1500	83.0
DP5	1500	83.0
DP6	1000	77.6
DP7	1000	77.6
DP8	1000	77.6
DP9	1000	77.6
DP10	1800	85.4
DP11	1000	77.6
DP12	1000	77.6
DP13	1000	77.6
DP14	1000	77.6
DP15	1000	77.6
CHDC Primary	400	66.3
CHDC Secondary	1000	77.6
Fly Ash 1	9.3	18.3
Fly Ash 2	200	58.5

(b) Pursuant to 326 IAC 6-3-2, 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:

$E = 4.10\ P^{0.67}$

where: E = rate of emission in pounds per hour and
P = process weight rate in tons per hour.

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

$E = 55.0\ P^{0.11} - 40$

where: E = rate of emission in pounds per hour and
P = process weight rate in tons per hour.

(c) Pursuant to 326 IAC 6-3-2, for the coal processing at a throughput rate greater than 200 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) Pursuant to 326 IAC 6-3-2(e)(3), for the ash unloading at a throughput rate greater than 200 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.

(e) Pursuant to 326 IAC 6-3-2(e)(2), for grinding and machining operations, a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour. Pursuant to 326 IAC 6-3-2, particulate emission rate from the brazing, cutting, soldering, welding, 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:

$E = 4.10\ P^{0.67}$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour.

326 IAC 7-1.1 Sulfur Dioxide Emission Limitations
Boiler AUX1 is not subject to 326 IAC 326 IAC 7-1.1 because its SO_2 PTE is less than 25 tons/year or 10 pounds/hour.

326 IAC 7-4-5 Sulfur Dioxide (SO_2)
(a) Pursuant to 326 IAC 7-4-5(4), Boiler 12 shall demonstrate that the sulfur dioxide emissions do not exceed the equivalent of 6.0 lbs/MMBtu, using a thirty (30) day rolling weighted average.

326 IAC 8-3 Organic Solvent Degreasing Operations
The source includes a cold cleaner operation constructed after January 1, 1990, therefore the source shall meet the requirements of 326 IAC 8-3-2 and 326 IAC 8-3-5.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

Emission Unit	Control Device	Timeframe for Testing	Pollutant	Frequency of Testing
Boiler 12	ESP	2.0 years from last compliance demonstration	PM	Every 2 years

The compliance monitoring requirements applicable to this source are as follows:

Control	Parameter	Frequency	Range	Excursions and Exceedances
ESP - Boiler 12	T-R sets in service and T-R electrical values of Primary and secondary voltages and Current.	Daily	> 90% T-R sets in service	Response Steps
	Visible Emissions		Normal-Abnormal	
	Opacity COMS	Continuous	< 35% for 3 consecutive 6 minute intervals	
Boiler 12	SO_2 CEMS	Continuous	6.0 lbs/MMBtu 30-day rolling weighted average	Response Steps
Boiler AUX 1	NOx CEMS	Continuous	< 40 tons per twelve (12) consecutive month period.	Response Steps
Baghouse - coal storage & handling	Water Pressure Drop	Weekly	1.0 to 8.0 inches	Response Steps
	Visible Emissions		Normal-Abnormal	

These monitoring conditions are necessary because:

1. T-R Sets are monitored to ensure the ESP is working properly to ensure compliance with 326 IAC 6-2.
2. The Opacity COMS is required per 40 CFR 64 CAM.
3. SO_2 CEMS is necessary to ensure compliance with 326 IAC 7-4 and 326 IAC 3-5.
4. NOx CEMS is necessary to ensure compliance with 40 CFR 60, Subpart Db and 326 IAC 3-5.
5. Baghouses for coal storage and handling; are needed to comply with 6-3-2

Recommendation

The staff recommends to the Commissioner that the Part 70 Operating Permit Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 19, 2010.

Conclusion

The operation of this stationary electric utility generating station shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. T 091-29806-00021.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Heath Hartley at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 232-8217 or toll free at 1-800-451-6027 extension 2-8217.

(b) A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Appendix A: Emissions Calculations

Emissions Summary Sheet

Company Name: NIPSCO - Michigan City Generating Station
Address City IN Zip: 101 Wabash Street, Michigan City, IN 46360
Permit Number: 091-29806-00021
Reviewer: Heath Hartley
Date: October 19, 2010

Uncontrolled PTE (ton/yr)

	PM	PM_{10}	$PM_{2.5}$	SO_2	NOx	VOC	CO	CO2e	HCl	Total HAP
Boiler 12	23,052	2,997	2,997	98,502	30,551	46	463	4,789,328	1111	1256
AUX 1	0.9	3.6	4	0.3	66.8	2.6	40.1	57,639	0	1
Insignificant Boilers	0	0	0	0	1.5	0	0.5	665	0	
Coal Drop Points	177	177	177	0	0	0	0	0	0	0
Coal Crusher House	254	103	103	0	0	0	0	0	0	0
Fly Ash handling	98	46	7	0	0	0	0	0	0	0
Total	23,582	3,327	3,288	98,503	30,619	49	503	4,847,632	1,111	1,257

Limited PTE (ton/yr)

	PM	PM_{10}	$PM_{2.5}$	SO_2	NOx	VOC	CO	CO2e	HCl	Total HAP
Boiler 12	4,888	2,997	2,997	98,502	30,551	46	463	4,789,328	1,111	1,256
AUX 1	1	4	4	0.3	< 40	3	40	57,639	0	1
Insignificant Boilers	0	0	0	0	2	0	0	665	0	
Coal Drop Points	177	177	177	0	0	0	0	0	0	0
Coal Crusher House	254	103	103	0	0	0	0	0	0	0
Fly Ash handling	98	46	7	0	0	0	0	0	0	0
Total	5,418	3,327	3,288	98,503	32,365	49	503	4,847,632	1,111	1,257

Appendix A: Emissions Calculations
Coal combustion: Chain grate stokers

Company Name: NIPSCO - Michigan City Generating Station
Address City IN Zip: 101 Wabash Street, Michigan City, IN 46360
Permit No./Plt ID: 091-29806-00021
Reviewer: Heath Hartley
Application Date: October 19, 2010

Heat Input Capacity MMBtu/hr		Heat Content of Coal Btu/lb of Coal	Potential Throughput tons/year	Weight % Sulfur in Fuel	Weight % Ash in Fuel
4650	Boiler 12	11,000	1,851,545	2.8	12.5

	Pollutant						
	PM*	PM10*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/ton	24.9 *(2A)*	3.2 *(0.26A)*	3.2 *(0.26A)*	106.4 *(38S)*	33.0	0.05	0.50
Potential Emission in tons/yr	23051.7	2996.7	2996.7	98502.2	30550.5	46.3	462.9
With PM control: 99.5% efficiency	115.3	15.0	15.0				
Potential Emission in lbs/MMBtu	1.132			**4.836**			
With PM control: 85.00% efficiency	**0.170**						

Methodology

*The PM emission factor is filterable PM only. The PM10 emission factor is filterable and condensable PM10 combined.
VOC emission factor is from Table 1.1-19 (Total non-methane organic carbon).
Potential Throughput (tons/year) = Heat Input Capacity (MMBtu/hr) x 10^6 Btu/MMBtu / Heat Content of Coal (Btu/lb) / 2000 lb/ton x 8,760 hrs/yr
Emission Factors from AP-42, Chapter 1.1 for industrial overfeed stoker SCC 1-02-002-05/25 (Supplement E, 9/98)
Additional emission factors for commercial/institutional and electric generation boilers are available in AP-42, Chapter 1.1.
Emission (tons/yr) = Throughput tons per year x Emission Factor (lb/ton) / 2,000 lb/ton
Emissions (lbs/MMBtu) = 10^6 Btu/MMBtu / Heat Content of Coal (Btu/lb) / 2000 lb/ton x Emission Factor (lb/ton)

Appendix A: Emissions Calculations

Coal fired boiler

Company Name: NIPSCO - Michigan City Generating Station
Address City IN Zip: 101 Wabash Street, Michigan City, IN 46360
Permit Number: 091-29806-00021
Reviewer: Heath Hartley
Date: October 19, 2010

			HAPs - Organics		
	HCl	HF	Benzene	Cyanide	PCDD/ PCDF
Emission Factor in lb/ton of coal	1.2	0.15	0.0013	0.0025	1.76E-09
Potential to Emit in tons/yr	1111	139	1	2	0

					HAPs - Metals			
	Selenium	Cadmium	Chromium	Manganese	Nickel	Beryllium	Arsenic	Lead
Emission Factor in lb/ton of coal	1.3E-03	5.1E-05	2.6E-04	4.9E-04	2.8E-04	2.10E-05	4.10E-04	4.20E-04
Potential Emission in tons/yr	1.2	4.7E-02	0.2	0.5	0.3	0.0	0.4	0.4

Emission Factors from AP-42, Chapter 1.1 for industrial overfeed stoker SCC 1-02-002-05/25 — Total HAPs: 1256

HAPs emission factors are available in AP-42, Chapter 1.1.

Emission (tons/yr) = Throughput tons per year x Emission Factor (lb/ton) / 2,000 lb/ton

	Greenhouse Gases		
	CO_2	CH_4	N_2O
Emission Factor, lb/ton	5133	1	0
Potential Emission, ton/yr	4,752,338	560	81
Summed Potential Emissions, tons/yr	4,752,979		
Warming Potential (100 Year)	1	21	310
CO2e Total in tons/yr	4,789,328		

Methodology

Pursuant to Table C-1 of 40 CFR Part 98 Subpart C, Bituminous coal has a default high heat value of 24.93 MMBtu/ton

Emission Factors from Tables C-1 and 2 of 40 CFR Part 98 Subpart C and have been converted from kg/MMBtu to lb/ton.

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (tons/yr) x Emission Factor (lb/ton)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O

Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR >100

Company Name: NIPSCO - Michigan City Generating Station
Address City IN Zip: 101 Wabash Street, Michigan City, IN 46360
Permit Number: 091-29806-00021
Reviewer: Heath Hartley
Date: October 19, 2010

Heat Input Capacity MMBtu/hr		Potential Throughput MMCF/yr
109	Boiler AUX1	954.8
1.257	Insig Boilers	11.0

	Pollutant					
	PM*	PM10*	SO2	Nox**	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	280.0 140.0 **see below	5.5	84.0
Potential Emission in tons/yr						
Boiler AUX1	0.9	3.6	0.3	66.8	2.6	40.1
Insig boilers	0.0	0.0	0.0	1.5	0.0	0.5
Total	0.9	3.7	0.3	68.4	2.7	40.6

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 280 (pre-NSPS) or 190 (post-NSPS), Low NOx Burner = 140, Flue gas recirculation = 100 (See Table 1.4-1)

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-01-006-01, 1-01-006-04 (AP-42 Supplement D 3/98)

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emission Calculations
Natural Gas Combustion Only

Company Name: NIPSCO - Michigan City Generating Station
Address City IN Zip: 101 Wabash Street, Michigan City, IN 46360
Permit Number: 091-29806-00021
Reviewer: Heath Hartley
Date: October 19, 2010

	HAPs - Organics				
	Benzene	Dichlorobenzen	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.01E-03	5.80E-04	3.62E-02	8.69E-01	1.64E-03

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	2.41E-04	5.31E-04	6.76E-04	1.84E-04	1.01E-03

Methodology is the same as previous page. Total HAPs 0.9
The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Greenhouse Gas Emissions

	Boiler AUX1			Insig Boilers		
	CO2	CH4	N2O	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2	120,000	2.3	2.2
Potential Emission in tons/yr	57,290	1.1	1.1	661	0.0	0.0
Summed Potential Emissions in tons/yr	57,293			661		
CO2e Total in tons/yr	57,639			665		

Methodology
The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O

Appendix A: Emission Calculations
Coal Storage and Handling

Company Name: NIPSCO - Michigan City Generating Station
Address City IN Zip: 101 Wabash Street, Michigan City, IN 46360
Permit Number: 091-29806-00021
Reviewer: Heath Hartley
Date: 10/19/10

KP=	0.74	particle size multiplier
U=	10	mean wind speed (mi/hr)
M=	4	Moisture content %
E=	0.00221	(1)Emission Factor (lb/ton)

Coal drop points			
Emission point	Throughput (tons/hr)	PM (lb/hr)	PM (ton/yr)
DP1	1500	3.3	14.5
DP2	1500	3.3	14.5
DP3	1500	3.3	14.5
DP4	1500	3.3	14.5
DP5	1500	3.3	14.5
DP6	1000	2.2	9.7
DP7	1000	2.2	9.7
DP8	1000	2.2	9.7
DP9	1000	2.2	9.7
DP10	1800	4.0	17.4
DP11	1000	2.2	9.7
DP12	1000	2.2	9.7
DP13	1000	2.2	9.7
DP14	1000	2.2	9.7
DP15	1000	2.2	9.7
Total	--	40	177

Coal Crusher House					
Emission point	Throughput (tons/hr)	PM EF (2)lb/ton	PM10 EF (2)lb/ton	PM (ton/yr)	PM10/PM2.5 (ton/yr)
CHDC Primary	400	0.02	0.009	35	16
CHDC Secondary	1000	0.05	0.02	219	88
Total	--	--	--	254	103

Fly Ash Handling							
Emission point	Throughput	(1) Emission Factor (lb/ton)			PM	PM10	PM2.5
	(tons/hr)	PM	PM10	PM2.5	(ton/yr)	(ton/yr)	(ton/yr)
Flyash handling	9.3	0.107	0.051	0.008	4	2	0
Flyash handling	200	0.107	0.051	0.008	94	44	7
Total	-	-	-	-	98	46	7

Methodology:
(1)E = (KP*0.0032)*(((U/5)^1.3)/(M/2)^1.4)
Emission Factors from AP-42 Chapter 13.2.4
(2) from AP-42 Table 11.24-2

Fly ash handling:	PM	PM10	PM2.5
KP=	0.74	0.35	0.053
U=	10		
M=	0.25		

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
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SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Kelly R. Carmichael
Northern Indiana Public Service Company - Michigan City Generating Station
101 Wabash Street
Michigan City, Indiana 46360

DATE: November 19, 2012

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

SUBJECT: Final Decision
Part 70 Operating Permit Renewal
091-29806-00021

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Philip W Pack, Responsible Official
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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November 19, 2012

TO: LaPorte County Public Library-Michigan City Branch

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: NIPSCO - Michigan City Generating Station
Permit Number: 091-29806-00021

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

IDEM Staff	PWAY 11/19/2012 NIPSCO - Michigan City 091-29806-00021 (final)		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**	

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2		Philip W Pack Interim Sr VP - Generation NIPSCO - Michigan City 801 E 86th Ave Merrillville IN 46410 *(RO CAATS)*									
3		Mr. Rudolph Nichols United Steelworkers of America Subdistrict 4 113 E. Washington St. Plymouth IN 46563 *(Affected Party)*									
4		Laporte County Public Library-Michigan City Branch 100 East 4th Street Michigan City IN 46360-3393 *(Library)*									
5		LaPorte County Commissioners 555 Michigan Avenue # 202 LaPorte IN 46350 *(Local Official)*									
6		Mr. Chris Hernandez Pipefitters Association, Local Union 597 8762 Louisiana St., Suite G Merrillville IN 46410 *(Affected Party)*									
7		Michigan City-City Council and Mayors Office 100 E. Michigan Blvd. Michigan City IN 46360 *(Local Official)*									
8		LaPorte County Health Department County Complex, 4th Floor, 809 State St. LaPorte IN 46350-3329 *(Health Department)*									
9		Mr. Dick Paulen Barnes & Thornburg 121 W Franklin Street Elkhart IN 46216 *(Affected Party)*									
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