



# 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](http://www.idem.IN.gov)

TO: Interested Parties / Applicant

DATE: June 7, 2010

RE: Praxair, Inc. / 089-28926-00435

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 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit 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 impracticable 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.



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Mr. Ed Jurasevich  
Praxair, Inc.  
2551 Dickey Road  
East Chicago, IN 46312

June 7, 2010

Re: 089-28926-00435  
Significant Permit Modification to  
Part 70 Renewal No.: T 089-23333-00435

Dear Mr. Jurasevich:

Praxair, Inc. was issued a Part 70 Operating Permit Renewal on January 14, 2008, for a stationary industrial gas manufacturing facility. A letter requesting changes to this permit was received on January 28, 2010. Pursuant to the provisions of 326 IAC 2-7-12 a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

Praxair, Inc. has applied to revise the emission limit for Boiler 3 as follows:

#### D.1.2 PSD Minor Limit [326 IAC 2-2]

Pursuant to SSM 089-20918-00435, issued on July 15, 2005:

- (a) ~~The total carbon monoxide (CO) production rate from process vent stacks of Reformer Nos. 1, 2, 3, and 4 (S/V 006, 010, 012, and 016, respectively) shall be less than 5,057.3 thousand standard cubic feet per twelve (12) consecutive month period with compliance determined at the end of each month; and the CO density shall not exceed 72 pounds per thousand cubic foot of gas produced at standard conditions (i.e., 1 atmosphere of pressure and 70 degrees Fahrenheit temperature).~~
- (b) ~~CO concentrations of 34.1% and 26.3% by weight for Reformers 2 and 3, respectively, or values established through performance testing for each process vent exhausting at stacks S/V 010 and 012 during startup of Reformers 2 and 3, respectively.~~
- (c) ~~CO concentrations of 18.3% and 28.8% by weight for Reformers 1 and 4, respectively, at maximum CO<sub>2</sub> removal, or values established through performance testing at other CO<sub>2</sub> removal levels for each process vent exhausting at stacks S/V 006 and 016 during startup of Reformers 1 and 4, respectively.~~
- (d) ~~The usage of natural gas in Boiler No. 3 shall be limited to 147.5 million cubic feet per twelve (12) consecutive month period, with compliance determined at the end of each month and the CO emissions shall not exceed 84.0 lb/MMScf.~~

**The total carbon monoxide (CO) emissions from the process vent stacks of Reformer No. 1, 2, 3, and 4 and Boiler No. 3 shall be less than 191.1 tons per twelve (12) consecutive month period with compliance determined at the end of each month; and the CO emissions shall be calculated by the following equation:**

$$\text{CO} = \frac{72.0 \text{ lb/TCF} \times (\text{A} + \text{B} + \text{C} + \text{D}) + 84.0 \text{ lb/MMCF} \times \text{E}}{2000 \text{ lb/ton}}$$

Where:

CO = Total CO emissions, tons/month

A = CO Production Rate of Reformer No. 1 (S/V 006), TCF/month

B = CO Production Rate of Reformer No. 2 (S/V 010), TCF/month

C = CO Production Rate of Reformer No. 3 (S/V 012), TCF/month

D = CO Production Rate of Reformer No. 4 (S/V 016), TCF/month

E = Natural gas consumption of Boiler No. 3, MMCF/month

TCF = Thousand cubic feet; CO emission factor for reformers is 72 lb/TCF at standard temperature and pressure (1 atm, 70°F)

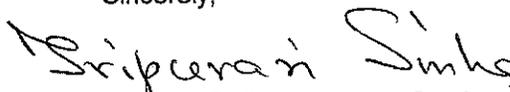
MMCF = Million cubic feet; CO emission factor for boilers is 84 lb/MMCF

Compliance with the above limits, combined with potential to emit CO from other emissions units at this source shall limit the CO emissions from the entire source to less than 250 tons per twelve (12) consecutive month period and will render 326 IAC 2-2 not applicable.

All other conditions of the permit shall remain unchanged and in effect. For your convenience, the entire Part 70 Operating Permit as modified will be provided at issuance. A copy of this permit is available on the Internet at: [www.in.gov/ai/appfiles/idem-caats/](http://www.in.gov/ai/appfiles/idem-caats/).

This decision is subject to the Indiana Administrative Orders and Procedures Act – IC 4-21.5-3-5. If you have any questions on this matter, please contact Kimberly Cottrell, OAQ, 100 North Senate Avenue, MC 61-53, Room 1003, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for Kimberly Cottrell or extension (3-0870), or dial (317) 233-0870.

Sincerely,



Tripurari P. Sinha, Ph. D., Section Chief  
Permits Branch  
Office of Air Quality

Attachments:

Updated Permit  
Technical Support Document

klc

cc: File – Lake County  
Lake County Health Department  
U.S. EPA, Region V  
Northwest Regional Office  
Compliance and Enforcement Branch  
Interested Parties

Ms. Elizabeth Casciani  
Praxair, Inc.  
175 East Park Drive  
Tonawanda, NY 14150

Mr. David Copeland  
Praxair, Inc.  
P.O. Box 44  
Tonawanda, NY 14150-0044



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## PART 70 OPERATING PERMIT RENEWAL OFFICE OF AIR QUALITY

**Praxair, Inc.**  
**2551 Dickey Road**  
**East Chicago, Indiana 46312**

(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 089-23333-00435	
Issued by / Original signed by:  Matthew Stuckey, Deputy Branch Chief Permits Branch Office of Air Quality	Issuance Date: January 14, 2008  Expiration Date: January 14, 2013

Administrative Amendment No.: T 089-26392-00435, issued on April 14, 2008

Significant Permit Modification No.: T 089-28926-00435	
Issued by: <i>Tripurari B. Sinha</i> Tripurari B. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: June 7, 2010  Expiration Date: January 14, 2013

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## SECTION A

## SOURCE SUMMARY

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

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

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The Permittee owns and operates a stationary industrial gas manufacturing source.

Source Address:	2551 Dickey Road, East Chicago, Indiana 46312
General Source Phone Number:	(219) 398 - 3777
SIC Code:	2813
County Location:	Lake
Source Location Status:	Nonattainment for PM 2.5 standard Attainment for all other criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under Nonattainment NSR Rules Minor Source, Under PSD Rules Minor Source, Section 112 of the Clean Air Act Not 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(15)]

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

- (a) One (1) steam methane Reformer No. 1, identified as A3 and installed in 1991, equipped with a low NOx burner, using a mixture of process tail gas and natural gas as fuel and rated at 45 million British thermal units (MMBtu) per hour, exhausting at one (1) stack identified as SV003. During Reformer No. 1 startup, carbon monoxide (CO) containing process gas will exhaust through one (1) process vent stack identified as S/V 006.

Reformer No. 1 is subject to the National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources in 40 CFR 63, Subpart VVVVVV.

- (b) One (1) steam methane Reformer No. 2, identified as A8 and installed in 1998, equipped with a low NOx burner, using a mixture of process tail gas and natural gas as fuel and rated at 37.1 MMBtu per hour, exhausting at one (1) stack identified as S/V 008. During Reformer No. 2 startup, carbon monoxide (CO) containing process gas will exhaust through one (1) process vent stack identified as S/V 010.

Reformer No. 2 is subject to the National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources in 40 CFR 63, Subpart VVVVVV.

- (c) One (1) steam methane Reformer No. 3, identified as A11 and installed in 1999, equipped with a low NOx burner using a mixture of process tail gas and natural gas as fuel and rated at 83.8 MMBtu per hour, exhausting at one (1) stack identified as S/V 011. During Reformer No. 3 startup, carbon monoxide (CO) containing process gas will exhaust through one (1) process vent stack identified as S/V 012;

Reformer No. 3 is subject to the National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources in 40 CFR 63, Subpart VVVVVV.

- (d) One (1) carbon dioxide (CO<sub>2</sub>) purification system, identified as A9 and installed in 1998, recovering and purifying CO<sub>2</sub> generated by reformers A3, A8, A11 and A17, with a process design rate of 172,000 standard cubic feet per hour (SCFH) of feed gas. The by-product stream from the system continuously exhausts through one (1) stack identified as S/V 014, with a maximum design flow rate of 5,657 SCFH and containing no more than 1.58 percent (%) by volume of carbon monoxide (CO). When the carbon dioxide purification system is not operating or at reduced capacity, same or all of the feed gas generated from reformers A3, A8, A11 and A17 will exhaust through one (1) stack identified as S/V 009, at maximum design flow rate of 172,000 SCFH and containing no more than 0.052% by volume of CO.
- (e) One (1) natural gas fired Boiler No. 3, identified as A7 and installed in 1998, rated at 38.8 MMBtu per hour, equipped with a low-NOx burner, and exhausting at one (1) stack identified as S/V 007.

Boiler No. 3 is subject to the Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units in 40 CFR 60, Subpart Dc.

- (f) One (1) steam methane Reformer No. 4, identified as A17, constructed in 2006, equipped with a low NOx burner, using a mixture of process tail gas and natural gas as fuel and rated at 213.9 MMBtu per hour, exhausting at one (1) stack identified as S/V 017. During Reformer No. 4 startup, carbon monoxide (CO) containing process gas will exhaust through one (1) process vent stack identified as S/V 016.

Reformer No. 4 is subject to the National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources in 40 CFR 63, Subpart VVVVVV.

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

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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) natural gas fired Boiler 1, identified as A1 and installed in 1978, rated at 5.6 MMBtu per hour, and exhausting at one (1) stack identified as SV001. [326 IAC 6-2-2]
- (2) One (1) natural gas fired Boiler 2, identified as A2 and installed in 1978, rated at 5.6 MMBtu per hour, and exhausting at one (1) stack identified as SV002. [326 IAC 6-2-2]
- (b) The following volatile organic compound (VOC) and hazardous air pollutant (HAP) storage containers:
- (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons, including three (3) diesel fuel oil storage tanks, identified as T001, T002, and T004 with storage capacities of 250 gallons, 55 gallons, and 200 gallons, respectively. [326 IAC 8-9]
- (c) Other categories with emissions below insignificant thresholds:
- Diesel fuel oil storage Tank T005 with storage capacity of 2,000 gallons and annual throughput less than 12,000 gallons. [326 IAC 8-9]

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

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

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

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

## SECTION B

## GENERAL CONDITIONS

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

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

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

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- (a) The Part 70 Operating Permit Renewal, T 089-23333-00435, is issued for a fixed term of five (5) years, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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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]

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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)]

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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)]

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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)]

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- (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)]

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

- (i) it contains a certification by a "responsible official", as defined by 326 IAC 2-7-1 (34), and
  - (ii) 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. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than April 15 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(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]  
[326 IAC 1-6-3]

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- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the time frame specified in Section D, 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 PMPs.

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs 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, and Northwest Regional Office no later than 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 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

no later than 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)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

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

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

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

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

- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
  - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
  - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

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

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- (a) All terms and conditions of permits established prior to T 089-23333-00435 and issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised under 326 IAC 2-7-10.5, or
  - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

**B.14 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]**

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

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

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- (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)]**

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- (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 reasonable deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

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- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
  
Any such application shall be certified 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.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)]**

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

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

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- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) without a prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

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

(4) The Permittee notifies the:

Indiana Department of Environmental Management  
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),(c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

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

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

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

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

(3) Any change in emissions; and

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

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require 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).

- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

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

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- (a) A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.
- (b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-3 (for sources located in NA areas).

**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]**

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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]**

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- (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

The application 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).

- (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]**

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- (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]**

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

## SECTION C

## SOURCE OPERATION CONDITIONS

Entire Source

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

#### C.1 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 twenty percent (20%) 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.2 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.3 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.4 Fugitive Dust Emissions [326 IAC 6-4]

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

#### C.5 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 61-52 IGCN 1003  
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by 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 Accredited Asbestos Inspector**  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

#### **C.6 Performance Testing [326 IAC 3-6]**

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- (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 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 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.7 Compliance Requirements [326 IAC 2-1.1-11]**

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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.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

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

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

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

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

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

#### **C.9 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]**

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- (a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEMS) and related equipment.
- (b) In the event that a breakdown of a continuous emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.

- (c) Whenever a continuous emission monitor other than an opacity monitor is malfunctioning or will be down for calibration, maintenance, or repairs for a period of four (4) hours or more, a calibrated backup CEMS shall be brought online within four (4) hours of shutdown of the primary CEMS, and shall be operated until such time as the primary CEMS is back in operation.
- (d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5.

**C.10 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

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- (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.11 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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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.12 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]**

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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.13 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]**

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

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
  - (1) initial inspection and evaluation;
  - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system);  
or

- (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not necessarily 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.

**C.14 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.15 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]**

- (a) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), the Permittee shall submit no later than July 1 an emission statement covering the previous calendar year as follows:
  - (1) starting in 2004 and every three (3) years thereafter, and
  - (2) any year not already required under (1) if the source emits volatile organic compounds or oxides of nitrogen into the ambient air at levels equal to or greater than twenty-five (25) tons during the previous calendar year.
- (b) The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
  - (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

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

The statement must be submitted to:

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

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

C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2] [326 IAC 2-3]

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- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.
- (c) If there is a "project" (as defined in 326 IAC 2-2-1(qq)) at an existing emissions unit or at a source with Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee)) and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
  - (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, document and maintain the following records:
    - (A) A description of the project.
    - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
    - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
      - (i) Baseline actual emissions;
      - (ii) Projected actual emissions;
      - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and

- (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
- (2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
- (3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-3]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days ~~of~~ after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (b) The address for report submittal is:  
  
Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (e) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:

- (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1(xx) and/or 326 IAC 2-3-1(qq), for that regulated NSR pollutant, and
  - (2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).
- (f) The report for a 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 (c)(2) and (3) in Section C - General Record Keeping Requirements.
  - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
  - (4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction project.

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

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

### **Stratospheric Ozone Protection**

#### **C.18 Compliance with 40 CFR 82 and 326 IAC 22-1**

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

## SECTION D.1

## FACILITY OPERATION CONDITIONS

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

- (a) One (1) steam methane Reformer No. 1, identified as A3 and installed in 1991, equipped with a low NOx burner, using a mixture of process tail gas and natural gas as fuel and rated at 45 million British thermal units (MMBtu) per hour, exhausting at one (1) stack identified as SV003. During Reformer No. 1 startup, carbon monoxide (CO) containing process gas will exhaust through one (1) process vent stack identified as S/V 006.

Reformer No. 1 is subject to the National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources in 40 CFR 63, Subpart VVVVVV.

- (b) One (1) steam methane Reformer No. 2, identified as A8 and installed in 1998, equipped with a low NOx burner, using a mixture of process tail gas and natural gas as fuel and rated at 37.1 MMBtu per hour, exhausting at one (1) stack identified as S/V 008. During Reformer No. 2 startup, carbon monoxide (CO) containing process gas will exhaust through one (1) process vent stack identified as S/V 010.

Reformer No. 2 is subject to the National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources in 40 CFR 63, Subpart VVVVVV.

- (c) One (1) steam methane Reformer No. 3, identified as A11 and installed in 1999, equipped with a low NOx burner using a mixture of process tail gas and natural gas as fuel and rated at 83.8 MMBtu per hour, exhausting at one (1) stack identified as S/V 011. During Reformer No. 3 startup, carbon monoxide (CO) containing process gas will exhaust through one (1) process vent stack identified as S/V 012.

Reformer No. 3 is subject to the National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources in 40 CFR 63, Subpart VVVVVV.

- (d) One (1) carbon dioxide (CO<sub>2</sub>) purification system, identified as A9 and installed in 1998, recovering and purifying CO<sub>2</sub> generated by reformers A3, A8, A11 and A17, with a process design rate of 172,000 standard cubic feet per hour (SCFH) of feed gas. The by-product stream from the system continuously exhausts through one (1) stack identified as S/V 014, with a maximum design flow rate of 5,657 SCFH and containing no more than 1.58 percent (%) by volume of carbon monoxide (CO). When the carbon dioxide purification system is not operating or at reduced capacity, same or all of the feed gas generated from reformers A3, A8, A11 and A17 will exhaust through one (1) stack identified as S/V 009, at maximum design flow rate of 172,000 SCFH and containing no more than 0.052% by volume of CO.

- (e) One (1) natural gas fired Boiler No. 3, identified as A7 and installed in 1998, rated at 38.8 MMBtu per hour, equipped with a low-NOx burner, and exhausting at one (1) stack identified as S/V 007.

Boiler No. 3 is subject to the Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units in 40 CFR 60, Subpart Dc.

- (f) One (1) steam methane Reformer No. 4, identified as A17, constructed in 2006, equipped with a low NOx burner, using a mixture of process tail gas and natural gas as fuel and rated at 213.9 MMBtu per hour, exhausting at one (1) stack identified as S/V 017. During Reformer No. 4 startup, carbon monoxide (CO) containing process gas will exhaust through one (1) process vent stack identified as S/V 016.

Reformer No. 4 is subject to the National Emission Standards for Hazardous Air Pollutants for

Chemical Manufacturing Area Sources in 40 CFR 63, Subpart VVVVVV.

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

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

**D.1.1 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-4]**

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the PM emissions from the 38.8 MMBtu per hour heat input Boiler No. 3, identified as A7, shall not exceed 0.395 pounds per MMBtu heat input.

This limitation is based on the following equation:

$$Pt = 1.09 / Q^{0.26} \quad \text{where: } Pt = \text{pounds of PM emitted per MMBtu heat input (lb/MMBtu)}$$
$$Q = \text{total source operating capacity (MMBtu/hr)}$$

**D.1.2 PSD Minor Limit [326 IAC 2-2]**

The total carbon monoxide (CO) emissions from the process vent stacks of Reformer No. 1, 2, 3, and 4 and Boiler No. 3 shall be less than 191.1 tons per twelve (12) consecutive month period with compliance determined at the end of each month; and the CO emissions shall be calculated by the following equation:

$$CO = \frac{72.0 \text{ lb/TCF} \times (A + B + C + D) + 84.0 \text{ lb/MMCF} \times E}{2000 \text{ lb/ton}}$$

Where:

CO = Total CO emissions, tons/month

A = CO Vent Flow of Reformer No. 1 (S/V 006), TCF/month

B = CO Vent Flow of Reformer No. 2 (S/V 010), TCF/month

C = CO Vent Flow of Reformer No. 3 (S/V 012), TCF/month

D = CO Vent Flow of Reformer No. 4 (S/V 016), TCF/month

E = Natural gas consumption of Boiler No. 3, MMCF/month

TCF = Thousand cubic feet; CO emission factor for reformers is 72 lb/TCF at standard temperature and pressure (1 atm, 70°F)

MMCF = Million cubic feet; CO emission factor for boilers is 84 lb/MMCF

Compliance with the above limits, combined with potential to emit CO from other emissions units at this source shall limit the CO emissions from the entire source to less than 250 tons per twelve (12) consecutive month period and will render 326 IAC 2-2 not applicable.

**D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

A Preventive Maintenance Plan (PMP) is required for Reformer No. 1, 2, 3 & 4, and Boiler No. 3. Section B - Preventive Maintenance Plan contains the Permittee's obligations with regard to the preventive maintenance plan required by this condition.

**Compliance Determination Requirements**

**D.1.4 CO Concentration**

Instrumentation that continuously computes the amount of CO vented at each process vent connected to stacks S/V 006, 010, 012, and 016 as a function of the duration of vent valve opening and process throughput, shall be continuously operated on Reformer Nos. 1, 2, 3, and 4 and shall be tested in accordance with Condition D.1.5.

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

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In order to determine compliance with Condition D.1.2, the Permittee shall perform emissions testing to determine the CO emissions for Reformer No. 1, 2, 3 and 4 process vent stacks before June 2012, utilizing the methods as approved by the Commissioner. Reformer No. 1 and 4 shall be tested at tail gas CO<sub>2</sub> removal levels that correspond to intended operation. These tests shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligations with regard to the performance testing required by this condition.

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

**D.1.6 Parametric Monitoring**

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- (a) A continuous monitoring system shall be calibrated, maintained, and operated on each process vent connected to, and exhausting at, stacks S/V 006, 010, 012, and 016 during startup and other process venting from Reformers 1, 2, 3, and 4, respectively, for compiling CO emissions using software with inputs of duration of vent valve openings plus process throughput. The output of this system shall be recorded continuously to compute the amount of carbon monoxide vented to determine compliance with Condition D.1.2.
- (b) The instruments used for determining parameter measurements shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months. Calibration of the reformer process vent valve monitoring system shall include a procedure that verifies functionality of open/closed valve operations.

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

**D.1.7 Record Keeping Requirements**

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- (a) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken continuously, except where otherwise indicated. Including paragraph (a)(1) of this condition, the records shall be complete and sufficient to establish compliance with the CO emission limits established in Condition D.1.2.
  - (1) The continuous records for Reformer Nos. 1, 2, 3, and 4 as follows:
    - (A) software compilation of CO emissions using process throughput and vent valve opening duration for each process vent connected to, and exhausting at, stacks S/V 006, 010, 012, and 016 during startup of Reformers 1, 2, 3, and 4 respectively; and
    - (B) CO Vent Flow at Reformer Nos. 1, 2, 3, and 4 process vent stacks (S/V006, 010, 012, and 016, respectively) and the continuously computed amount of carbon monoxide emitted.
  - (2) Monthly records of the natural gas consumption for Boiler No. 3.
  - (3) The amount of carbon monoxide (CO) emitted for each compliance period (tons per month).
- (b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

#### D.1.8 Reporting Requirements

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A quarterly summary of the information to document the compliance status with Condition D.1.2 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days following the end of each calendar quarter. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). Section C - General Reporting Requirements contains the Permittee's obligations with regard to the reporting required by this condition.

#### **New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]**

##### D.1.9 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A]

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The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to Boiler No. 3 except when otherwise specified in 40 CFR Part 60, Subpart Dc

##### D.1.10 Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units [326 IAC 12-1] [40 CFR Part 60, Subpart Dc]

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Boiler No. 3 shall comply with the following provisions of 40 CFR Part 60, Subpart Dc (included as Attachment A of this permit):

- (a) 40 CFR 60.40c(a)
- (b) 40 CFR 60.41c
- (c) 40 CFR 60.48c(g)

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

##### D.1.11 General Provisions Relating to NESHAP [326 IAC 20-1] [40 CFR Part 63, Subpart VVVVVV]

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The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to Reformer No. 1, 2, 3 and 4 except when otherwise specified in Table 9 of 40 CFR Part 63, Subpart VVVVVV.

##### D.1.12 National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources [40 CFR Part 63, Subpart VVVVVV]

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Reformer No. 1, 2, 3 and 4 shall comply with the following provisions of 40 CFR Part 63, Subpart VVVVVV (included as Attachment B of this permit) with an initial compliance date of October 29, 2012:

- (a) 40 CFR 63.11494
- (b) 40 CFR 63.11495(a)(1), (3), (4), and (5)
- (c) 40 CFR 63.11496(f)(2)
- (d) 40 CFR 63.11500
- (e) 40 CFR 63.11501(a), (b), (c), and (d)
- (f) 40 CFR 63.11502
- (g) 40 CFR 63.11503
- (h) Table 1 to Subpart VVVVVV of Part 63
- (i) Table 9 to Subpart VVVVVV of Part 63

## SECTION D.2

## FACILITY OPERATION CONDITIONS

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

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) natural gas fired Boiler 1, identified as A1 and installed in 1978, rated at 5.6 MMBtu per hour, and exhausting at one (1) stack identified as SV001. [326 IAC 6-2-2]
  - (2) One (1) natural gas fired Boiler 2, identified as A2 and installed in 1978, rated at 5.6 MMBtu per hour, and exhausting at one (1) stack identified as SV002. [326 IAC 6-2-2]
- (b) The following volatile organic compound (VOC) and hazardous air pollutant (HAP) storage containers:
  - (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons, including three (3) diesel fuel oil storage tanks, identified as T001, T002, and T004 with storage capacities of 250 gallons, 55 gallons, and 200 gallons, respectively. [326 IAC 8-9]
- (c) Other categories with emissions below insignificant thresholds:

Diesel fuel oil storage Tank T005 with storage capacity of 2,000 gallons and annual throughput less than 12,000 gallons. [326 IAC 8-9]
- (d) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]

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

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

#### D.2.1 Particulate Matter (PM) [326 IAC 6-2-2]

Pursuant to 326 IAC 6-2-2, the PM emissions from each of 5.6 MMBtu per hour heat input Boiler Nos. 1 and 2, respectively identified as A1 and A2, shall be limited to 0.591 pounds per MMBtu heat input.

This limitation is based on the following equation:

$$Pt = 0.87 / Q^{0.16} \quad \text{where: } Pt = \text{pounds of PM emitted per MMBtu heat input (lb/MMBtu)}$$
$$Q = \text{total source maximum operating capacity rating (MMBtu/hr)}$$

#### D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), cold cleaner degreasing operation 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.2.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

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- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:
  - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
    - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
    - (B) The solvent is agitated; or
    - (C) The solvent is heated.
  - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
  - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
  - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
  - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
    - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
    - (B) A water cover when solvent is used is insoluble in, and heavier than, water.

- (C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
  - (1) Close the cover whenever articles are not being handled in the degreaser.
  - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
  - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

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

#### D.2.4 Record Keeping and Reporting Requirements

Pursuant to 326 IAC 8-9-1(b) (Volatile Organic Liquid Storage Vessels), the source shall be exempt from all provisions of the rule, except that the source shall comply with the following recording and reporting requirements for the diesel fuel oil storage tanks T001, T002, T004 and T005:

- (a) Maintain a record and submit to the department a report containing the following information for each vessel:
  - (1) The vessel identification number.
  - (2) The vessel dimensions.
  - (3) The vessel capacity.
- (b) All records required by (b)(1) of this condition shall be maintained for the life of the affected vessel.
- (c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

### PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Praxair, Inc.  
Source Address: 2551 Dickey Road, East Chicago, Indiana 4631  
Part 70 Permit No.: T 089-23333-00435

**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: Praxair, Inc.  
Source Address: 2551 Dickey Road, East Chicago, Indiana 4631  
Part 70 Permit No.: T 089-23333-00435

**This form consists of 2 pages**

**Page 1 of 2**

<input type="checkbox"/>	This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none"><li>• The Permittee must notify the Office of Air Quality (OAQ), no later than four (4) daytime business hours (1-800-451-6027 or 317-233-0178, ask for Compliance and Enforcement Branch); and</li><li>• The Permittee must submit notice in writing or by facsimile no later than two (2) days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.</li></ul>
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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? <input type="checkbox"/> Y <input type="checkbox"/> N Describe:
Type of Pollutants Emitted: <input type="checkbox"/> TSP <input type="checkbox"/> PM-10 <input type="checkbox"/> SO <sub>2</sub> <input type="checkbox"/> VOC <input type="checkbox"/> NO <sub>x</sub> <input type="checkbox"/> CO <input type="checkbox"/> Pb <input type="checkbox"/> 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**

Source Name: Praxair, Inc.  
Source Address: 2551 Dickey Road, East Chicago, Indiana 4631  
Part 70 Permit No.: T 089-23333-00435  
Facility: Reformers No. 1, 2, 3, and 4 and Boiler No. 3  
Parameter: CO Emissions  
Limit: 191.1 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR: \_\_\_\_\_

Month	CO Emissions for This Month (tons)	CO Emissions for Previous 11 Months (tons)	CO Emissions for 12-Month Period (tons)

- No deviation occurred in this quarter.
- Deviations occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted By: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

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

Source Name: Praxair, Inc.  
Source Address: 2551 Dickey Road, East Chicago, Indiana 4631  
Part 70 Permit No.: T 089-23333-00435

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

**Permit Requirement** (specify permit condition #)

**Date of Deviation:**

**Duration of Deviation:**

**Number of Deviations:**

**Probable Cause of Deviation:**

**Response Steps Taken:**

**Permit Requirement** (specify permit condition #)

**Date of Deviation:**

**Duration of Deviation:**

**Number of Deviations:**

**Probable Cause of Deviation:**

**Response Steps Taken:**

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

Form Completed By: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

## Attachment A – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units [326 IAC 12] [40 CFR Part 60, Subpart Dc]

### Source Description and Location

Source Name:	Praxair, Inc.
Source Location:	2551 Dickey Road, East Chicago, Indiana 46312
County:	Lake
SIC Code:	2813
Operation Permit Renewal No.:	T 089-23333-00435
Operation Permit Renewal Issuance Date:	January 14, 2008
Significant Permit Modification No.:	089-28926-00435
Permit Reviewer:	Kimberly Cottrell

### NSPS [40 CFR Part 60, Subpart Dc]

#### Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

**Source:** 72 FR 32759, June 13, 2007, unless otherwise noted.

#### § 60.40c Applicability and delegation of authority.

(a) Except as provided in paragraphs (d), (e), (f), and (g) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).

(b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, §60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.

(c) Steam generating units that meet the applicability requirements in paragraph (a) of this section are not subject to the sulfur dioxide (SO<sub>2</sub>) or particulate matter (PM) emission limits, performance testing requirements, or monitoring requirements under this subpart (§§60.42c, 60.43c, 60.44c, 60.45c, 60.46c, or 60.47c) during periods of combustion research, as defined in §60.41c.

(d) Any temporary change to an existing steam generating unit for the purpose of conducting combustion research is not considered a modification under §60.14.

(e) Heat recovery steam generators that are associated with combined cycle gas turbines and meet the applicability requirements of subpart KKKK of this part are not subject to this subpart. This subpart will continue to apply to all other heat recovery steam generators that are capable of combusting more than or equal to 2.9 MW (10 MMBtu/hr) heat input of fossil fuel but less than or equal to 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).

(f) Any facility covered by subpart AAAA of this part is not subject by this subpart.

(g) Any facility covered by an EPA approved State or Federal section 111(d)/129 plan implementing subpart BBBB of this part is not subject by this subpart.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009]

#### § 60.41c Definitions.

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

*Annual capacity factor* means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

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

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

*Cogeneration steam generating unit* means a steam generating unit that simultaneously produces both electrical (or mechanical) and thermal energy from the same primary energy source.

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

*Combustion research* means the experimental firing of any fuel or combination of fuels in a steam generating unit for the purpose of conducting research and development of more efficient combustion or more effective prevention or control of air pollutant emissions from combustion, provided that, during these periods of research and development, the heat generated is not used for any purpose other than preheating combustion air for use by that steam generating unit ( *i.e.* , the heat generated is released to the atmosphere without being used for space heating, process heating, driving pumps, preheating combustion air for other units, generating electricity, or any other purpose).

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

*Distillate oil* means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see §60.17) or diesel fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D975 (incorporated by reference, see §60.17).

*Dry flue gas desulfurization technology* means a SO<sub>2</sub> control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline reagent and water, whether introduced separately or as a premixed slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.

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

*Emerging technology* means any SO<sub>2</sub> control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under §60.48c(a)(4).

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

*Fluidized bed combustion technology* means a device wherein fuel is distributed onto a bed (or series of beds) of limestone aggregate (or other sorbent materials) for combustion; and these materials are forced upward in the device by the flow of combustion air and the gaseous products of combustion. Fluidized bed combustion technology includes, but is not limited to, bubbling bed units and circulating bed units.

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

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

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

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

*Natural gas* means:

- (1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or
- (2) Liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see §60.17); or
- (3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 megajoules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot).

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

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

*Potential sulfur dioxide emission rate* means the theoretical SO<sub>2</sub> emissions (nanograms per joule (ng/J) or lb/MMBtu heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

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

*Residual oil* means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see §60.17).

*Steam generating unit* means a device that combusts any fuel and produces steam or heats water or heats any heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

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

*Wet flue gas desulfurization technology* means an SO<sub>2</sub> control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

*Wet scrubber system* means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of PM or SO<sub>2</sub>.

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

### § 60.42c Standard for sulfur dioxide (SO<sub>2</sub>).

(a) Except as provided in paragraphs (b), (c), and (e) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that combusts only coal shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO<sub>2</sub> in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO<sub>2</sub> emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO<sub>2</sub> in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO<sub>2</sub> in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO<sub>2</sub> emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO<sub>2</sub> in excess of the emission limit is determined pursuant to paragraph (e)(2) of this section.

(b) Except as provided in paragraphs (c) and (e) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that:

(1) Combusts only coal refuse alone in a fluidized bed combustion steam generating unit shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 20 percent (0.20) of the potential SO<sub>2</sub> emission rate (80 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is fired with coal refuse, the affected facility subject to paragraph (a) of this section. If oil or any other fuel (except coal) is fired with coal refuse, the affected facility is subject to the 87 ng/J (0.20 lb/MMBtu) heat input SO<sub>2</sub> emissions limit or the 90 percent SO<sub>2</sub> reduction requirement specified in paragraph (a) of this section and the emission limit is determined pursuant to paragraph (e)(2) of this section.

(2) Combusts only coal and that uses an emerging technology for the control of SO<sub>2</sub> emissions shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 50 percent (0.50) of the potential SO<sub>2</sub> emission rate (50 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 260 ng/J (0.60 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility is subject to the 50 percent SO<sub>2</sub> reduction requirement specified in this paragraph and the emission limit determined pursuant to paragraph (e)(2) of this section.

(c) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, alone or in combination with any other fuel, and is listed in paragraphs (c)(1), (2), (3), or (4) of this section shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of the emission limit determined pursuant to paragraph (e)(2) of this section. Percent reduction requirements are not applicable to affected facilities under paragraphs (c)(1), (2), (3), or (4).

(1) Affected facilities that have a heat input capacity of 22 MW (75 MMBtu/hr) or less.

(2) Affected facilities that have an annual capacity for coal of 55 percent (0.55) or less and are subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for coal of 55 percent (0.55) or less.

(3) Affected facilities located in a noncontinental area.

(4) Affected facilities that combust coal in a duct burner as part of a combined cycle system where 30 percent (0.30) or less of the heat entering the steam generating unit is from combustion of coal in the duct burner and 70 percent (0.70) or more of the heat entering the steam generating unit is from exhaust gases entering the duct burner.

(d) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 215 ng/J (0.50 lb/MMBtu) heat input; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

(e) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, or coal and oil with any other fuel shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of the following:

(1) The percent of potential SO<sub>2</sub>emission rate or numerical SO<sub>2</sub>emission rate required under paragraph (a) or (b)(2) of this section, as applicable, for any affected facility that

(i) Combusts coal in combination with any other fuel;

(ii) Has a heat input capacity greater than 22 MW (75 MMBtu/hr); and

(iii) Has an annual capacity factor for coal greater than 55 percent (0.55); and

(2) The emission limit determined according to the following formula for any affected facility that combusts coal, oil, or coal and oil with any other fuel:

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

Where:

E<sub>s</sub>= SO<sub>2</sub>emission limit, expressed in ng/J or lb/MMBtu heat input;

K<sub>a</sub>= 520 ng/J (1.2 lb/MMBtu);

K<sub>b</sub>= 260 ng/J (0.60 lb/MMBtu);

K<sub>c</sub>= 215 ng/J (0.50 lb/MMBtu);

H<sub>a</sub>= Heat input from the combustion of coal, except coal combusted in an affected facility subject to paragraph (b)(2) of this section, in Joules (J) [MMBtu];

H<sub>b</sub>= Heat input from the combustion of coal in an affected facility subject to paragraph (b)(2) of this section, in J (MMBtu); and

H<sub>c</sub>= Heat input from the combustion of oil, in J (MMBtu).

(f) Reduction in the potential SO<sub>2</sub>emission rate through fuel pretreatment is not credited toward the percent reduction requirement under paragraph (b)(2) of this section unless:

(1) Fuel pretreatment results in a 50 percent (0.50) or greater reduction in the potential SO<sub>2</sub>emission rate; and

(2) Emissions from the pretreated fuel (without either combustion or post-combustion SO<sub>2</sub>control) are equal to or less than the emission limits specified under paragraph (b)(2) of this section.

(g) Except as provided in paragraph (h) of this section, compliance with the percent reduction requirements, fuel oil sulfur limits, and emission limits of this section shall be determined on a 30-day rolling average basis.

(h) For affected facilities listed under paragraphs (h)(1), (2), or (3) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under §60.48c(f), as applicable.

(1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 MMBtu/hr).

(2) Residual oil-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).

(3) Coal-fired facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).

(i) The SO<sub>2</sub>emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.

(j) For affected facilities located in noncontinental areas and affected facilities complying with the percent reduction standard, only the heat input supplied to the affected facility from the combustion of coal and oil is counted under this section. No credit is provided for the heat input to the affected facility from wood or other fuels or for heat derived from exhaust gases from other sources, such as stationary gas turbines, internal combustion engines, and kilns.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009]

**§ 60.43c Standard for particulate matter (PM).**

(a) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal or combusts mixtures of coal with other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:

(1) 22 ng/J (0.051 lb/MMBtu) heat input if the affected facility combusts only coal, or combusts coal with other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.

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

(b) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts wood or combusts mixtures of wood with other fuels (except coal) and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emissions limits:

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

(2) 130 ng/J (0.30 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood of 30 percent (0.30) or less and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for wood of 30 percent (0.30) or less.

(c) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that can combust coal, wood, or oil and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. Owners and operators of an affected facility that elect to install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for measuring PM emissions according to the requirements of this subpart and are subject to a federally enforceable PM limit of 0.030 lb/MMBtu or less are exempt from the opacity standard specified in this paragraph.

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

(e)(1) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 13 ng/J (0.030 lb/MMBtu) heat input, except as provided in paragraphs (e)(2), (e)(3), and (e)(4) of this section.

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

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

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

(3) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input.

(4) 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 that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM standard under §60.43c and not using a post-combustion technology (except a wet scrubber) to reduce PM or SO<sub>2</sub> emissions is not subject to the PM limit in this section.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

### § 60.44c Compliance and performance test methods and procedures for sulfur dioxide.

(a) Except as provided in paragraphs (g) and (h) of this section and §60.8(b), performance tests required under §60.8 shall be conducted following the procedures specified in paragraphs (b), (c), (d), (e), and (f) of this section, as applicable. Section 60.8(f) does not apply to this section. The 30-day notice required in §60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator.

(b) The initial performance test required under §60.8 shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the percent reduction requirements and SO<sub>2</sub> emission limits under §60.42c shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after the initial startup of the facility. The steam generating unit load during the 30-day period does not have to be the maximum design heat input capacity, but must be representative of future operating conditions.

(c) After the initial performance test required under paragraph (b) of this section and §60.8, compliance with the percent reduction requirements and SO<sub>2</sub> emission limits under §60.42c is based on the average percent reduction and the average SO<sub>2</sub> emission rates for 30 consecutive steam generating unit operating days. A separate performance test is completed at the end of each steam generating unit operating day, and a new 30-day average percent reduction and SO<sub>2</sub> emission rate are calculated to show compliance with the standard.

(d) If only coal, only oil, or a mixture of coal and oil is combusted in an affected facility, the procedures in Method 19 of appendix A of this part are used to determine the hourly SO<sub>2</sub> emission rate (E<sub>ho</sub>) and the 30-day average SO<sub>2</sub> emission rate (E<sub>ao</sub>). The hourly averages used to compute the 30-day averages are obtained from the CEMS. Method 19 of appendix A of this part shall be used to calculate E<sub>ao</sub> when using daily fuel sampling or Method 6B of appendix A of this part.

(e) If coal, oil, or coal and oil are combusted with other fuels:

(1) An adjusted E<sub>ho</sub> (E<sub>ho0</sub>) is used in Equation 19–19 of Method 19 of appendix A of this part to compute the adjusted E<sub>ao</sub> (E<sub>ao0</sub>). The E<sub>ho0</sub> is computed using the following formula:

$$E_{ho0} = \frac{E_{ho} - E_w(1 - X_1)}{X_1}$$

Where:

E<sub>ho0</sub> = Adjusted E<sub>ho</sub>, ng/J (lb/MMBtu);

E<sub>ho</sub> = Hourly SO<sub>2</sub> emission rate, ng/J (lb/MMBtu);

E<sub>w</sub> = SO<sub>2</sub> concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 9 of appendix A of this part, ng/J (lb/MMBtu). The value

$E_w$  for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure  $E_w$  if the owner or operator elects to assume  $E_w = 0$ .

$X_k$  = Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(2) The owner or operator of an affected facility that qualifies under the provisions of §60.42c(c) or (d) (where percent reduction is not required) does not have to measure the parameters  $E_w$  or  $X_k$  if the owner or operator of the affected facility elects to measure emission rates of the coal or oil using the fuel sampling and analysis procedures under Method 19 of appendix A of this part.

(f) Affected facilities subject to the percent reduction requirements under §60.42c(a) or (b) shall determine compliance with the  $SO_2$  emission limits under §60.42c pursuant to paragraphs (d) or (e) of this section, and shall determine compliance with the percent reduction requirements using the following procedures:

(1) If only coal is combusted, the percent of potential  $SO_2$  emission rate is computed using the following formula:

$$\%P_s = 100 \left( 1 - \frac{\%R_g}{100} \right) \left( 1 - \frac{\%R_f}{100} \right)$$

Where:

$\%P_s$  = Potential  $SO_2$  emission rate, in percent;

$\%R_g$  =  $SO_2$  removal efficiency of the control device as determined by Method 19 of appendix A of this part, in percent; and

$\%R_f$  =  $SO_2$  removal efficiency of fuel pretreatment as determined by Method 19 of appendix A of this part, in percent.

(2) If coal, oil, or coal and oil are combusted with other fuels, the same procedures required in paragraph (f)(1) of this section are used, except as provided for in the following:

(i) To compute the  $\%P_s$ , an adjusted  $\%R_g$  ( $\%R_{g0}$ ) is computed from  $E_{ao0}$  from paragraph (e)(1) of this section and an adjusted average  $SO_2$  inlet rate ( $E_{ai0}$ ) using the following formula:

$$\%R_{g0} = 100 \left( 1 - \frac{E_w}{E_{ai0}} \right)$$

Where:

$\%R_{g0}$  = Adjusted  $\%R_g$ , in percent;

$E_{ao0}$  = Adjusted  $E_{ao}$ , ng/J (lb/MMBtu); and

$E_{ai0}$  = Adjusted average  $SO_2$  inlet rate, ng/J (lb/MMBtu).

(ii) To compute  $E_{ai0}$ , an adjusted hourly  $SO_2$  inlet rate ( $E_{hi0}$ ) is used. The  $E_{hi0}$  is computed using the following formula:

$$E_{hi0} = \frac{E_{hi} - E_w(1 - X_1)}{X_1}$$

Where:

$E_{hi0}$  = Adjusted  $E_{hi}$ , ng/J (lb/MMBtu);

$E_{hi}$  = Hourly  $SO_2$  inlet rate, ng/J (lb/MMBtu);

$E_w$  = SO<sub>2</sub> concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 19 of appendix A of this part, ng/J (lb/MMBtu). The value  $E_w$  for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure  $E_w$  if the owner or operator elects to assume  $E_w = 0$ ; and

$X_k$  = Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(g) For oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under §60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under §60.46c(d)(2).

(h) For affected facilities subject to §60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO<sub>2</sub> standards based on fuel supplier certification, the performance test shall consist of the certification from the fuel supplier, as described in §60.48c(f), as applicable.

(i) The owner or operator of an affected facility seeking to demonstrate compliance with the SO<sub>2</sub> standards under §60.42c(c)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(j) The owner or operator of an affected facility shall use all valid SO<sub>2</sub> emissions data in calculating %P<sub>s</sub> and E<sub>no</sub> under paragraphs (d), (e), or (f) of this section, as applicable, whether or not the minimum emissions data requirements under §60.46c(f) are achieved. All valid emissions data, including valid data collected during periods of startup, shutdown, and malfunction, shall be used in calculating %P<sub>s</sub> or E<sub>no</sub> pursuant to paragraphs (d), (e), or (f) of this section, as applicable.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

### **§ 60.45c Compliance and performance test methods and procedures for particulate matter.**

(a) The owner or operator of an affected facility subject to the PM and/or opacity standards under §60.43c shall conduct an initial performance test as required under §60.8, and shall conduct subsequent performance tests as requested by the Administrator, to determine compliance with the standards using the following procedures and reference methods, except as specified in paragraph (c) of this section.

(1) Method 1 of appendix A of this part shall be used to select the sampling site and the number of traverse sampling points.

(2) Method 3A or 3B of appendix A–2 of this part shall be used for gas analysis when applying Method 5 or 5B of appendix A–3 of this part or 17 of appendix A–6 of this part.

(3) Method 5, 5B, or 17 of appendix A of this part shall be used to measure the concentration of PM as follows:

(i) Method 5 of appendix A of this part may be used only at affected facilities without wet scrubber systems.

(ii) Method 17 of appendix A of this part may be used at affected facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of Sections 8.1 and 11.1 of Method 5B of appendix A of this part may be used in Method 17 of appendix A of this part only if Method 17 of appendix A of this part is used in conjunction with a wet scrubber system. Method 17 of appendix A of this part shall not be used in conjunction with a wet scrubber system if the effluent is saturated or laden with water droplets.

(iii) Method 5B of appendix A of this part may be used in conjunction with a wet scrubber system.

(4) The sampling time for each run shall be at least 120 minutes and the minimum sampling volume shall be 1.7 dry standard cubic meters (dscm) [60 dry standard cubic feet (dscf)] except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.

(5) For Method 5 or 5B of appendix A of this part, the temperature of the sample gas in the probe and filter holder shall be monitored and maintained at  $160 \pm 14$  °C ( $320 \pm 25$  °F).

(6) For determination of PM emissions, an oxygen (O<sub>2</sub>) or carbon dioxide (CO<sub>2</sub>) measurement shall be obtained simultaneously with each run of Method 5, 5B, or 17 of appendix A of this part by traversing the duct at the same sampling location.

(7) For each run using Method 5, 5B, or 17 of appendix A of this part, the emission rates expressed in ng/J (lb/MMBtu) heat input shall be determined using:

(i) The O<sub>2</sub> or CO<sub>2</sub> measurements and PM measurements obtained under this section, (ii) The dry basis F factor, and

(iii) The dry basis emission rate calculation procedure contained in Method 19 of appendix A of this part.

(8) Method 9 of appendix A–4 of this part shall be used for determining the opacity of stack emissions.

(b) The owner or operator of an affected facility seeking to demonstrate compliance with the PM standards under §60.43c(b)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(c) In place of PM testing with Method 5 or 5B of appendix A–3 of this part or Method 17 of appendix A–6 of this part, an owner or operator may elect to install, calibrate, maintain, and operate a CEMS for monitoring PM emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who elects to continuously monitor PM emissions instead of conducting performance testing using Method 5 or 5B of appendix A–3 of this part or Method 17 of appendix A–6 of this part shall install, calibrate, maintain, and operate a CEMS and shall comply with the requirements specified in paragraphs (c)(1) through (c)(14) of this section.

(1) Notify the Administrator 1 month before starting use of the system.

(2) Notify the Administrator 1 month before stopping use of the system.

(3) The monitor shall be installed, evaluated, and operated in accordance with §60.13 of subpart A of this part.

(4) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under §60.8 of subpart A of this part or within 180 days of notification to the Administrator of use of CEMS if the owner or operator was previously determining compliance by Method 5, 5B, or 17 of appendix A of this part performance tests, whichever is later.

(5) The owner or operator of an affected facility shall conduct an initial performance test for PM emissions as required under §60.8 of subpart A of this part. Compliance with the PM emission limit shall be determined by using the CEMS specified in paragraph (d) of this section to measure PM and calculating a 24-hour block arithmetic average emission concentration using EPA Reference Method 19 of appendix A of this part, section 4.1.

(6) Compliance with the PM emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using CEMS outlet data.

(7) At a minimum, valid CEMS hourly averages shall be obtained as specified in paragraph (c)(7)(i) of this section for 75 percent of the total operating hours per 30-day rolling average.

(i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.

(ii) [Reserved]

(8) The 1-hour arithmetic averages required under paragraph (c)(7) of this section shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under §60.13(e)(2) of subpart A of this part.

(9) All valid CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (c)(7) of this section are not met.

(10) The CEMS shall be operated according to Performance Specification 11 in appendix B of this part.

(11) During the correlation testing runs of the CEMS required by Performance Specification 11 in appendix B of this part, PM and O<sub>2</sub>(or CO<sub>2</sub>) 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 the Federal Register, whichever is later, for condensable PM emissions, Method 202 of appendix M of part 51 shall be used; and

(iii) For O<sub>2</sub> (or CO<sub>2</sub>), Method 3A or 3B of appendix A–2 of this part, as applicable shall be used.

(12) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 2 in appendix F of this part. Relative Response Audit's must be performed annually and Response Correlation Audits must be performed every 3 years.

(13) When PM emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Administrator or EPA Reference Method 19 of appendix A of this part to provide, as necessary, valid emissions data for a minimum of 75 percent of total operating hours on a 30-day rolling average.

(14) After July 1, 2011, within 90 days after the date of completing each performance evaluation required by paragraph (c)(11) of this section, the owner or operator of the affected facility must either 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> or mail a copy to: United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; Mail Code: D243–01; RTP, NC 27711.

(d) The owner or operator of an affected facility seeking to demonstrate compliance under §60.43c(e)(4) shall follow the applicable procedures under §60.48c(f). For residual oil-fired affected facilities, fuel supplier certifications are only allowed for facilities with heat input capacities between 2.9 and 8.7 MW (10 to 30 MMBtu/hr).

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

#### **§ 60.46c Emission monitoring for sulfur dioxide.**

(a) Except as provided in paragraphs (d) and (e) of this section, the owner or operator of an affected facility subject to the SO<sub>2</sub> emission limits under §60.42c shall install, calibrate, maintain, and operate a CEMS for measuring SO<sub>2</sub> concentrations and either O<sub>2</sub> or CO<sub>2</sub> concentrations at the outlet of the SO<sub>2</sub> control device (or the outlet of the steam generating unit if no SO<sub>2</sub> control device is used), and shall record the output of the system. The owner or operator of an affected facility subject to the percent reduction requirements under §60.42c shall measure SO<sub>2</sub> concentrations and either O<sub>2</sub> or CO<sub>2</sub> concentrations at both the inlet and outlet of the SO<sub>2</sub> control device.

(b) The 1-hour average SO<sub>2</sub> emission rates measured by a CEMS shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under §60.42c. Each 1-hour average SO<sub>2</sub> emission rate must be based on at least 30 minutes of operation, and shall be calculated using the data points required under §60.13(h)(2). Hourly SO<sub>2</sub> emission rates are not calculated if the affected facility is operated less than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day.

(c) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the CEMS.

(1) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 of appendix B of this part.

(2) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of appendix F of this part.

(3) For affected facilities subject to the percent reduction requirements under §60.42c, the span value of the SO<sub>2</sub>CEMS at the inlet to the SO<sub>2</sub>control device shall be 125 percent of the maximum estimated hourly potential SO<sub>2</sub>emission rate of the fuel combusted, and the span value of the SO<sub>2</sub>CEMS at the outlet from the SO<sub>2</sub>control device shall be 50 percent of the maximum estimated hourly potential SO<sub>2</sub>emission rate of the fuel combusted.

(4) For affected facilities that are not subject to the percent reduction requirements of §60.42c, the span value of the SO<sub>2</sub>CEMS at the outlet from the SO<sub>2</sub>control device (or outlet of the steam generating unit if no SO<sub>2</sub>control device is used) shall be 125 percent of the maximum estimated hourly potential SO<sub>2</sub>emission rate of the fuel combusted.

(d) As an alternative to operating a CEMS at the inlet to the SO<sub>2</sub>control device (or outlet of the steam generating unit if no SO<sub>2</sub>control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO<sub>2</sub>emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEMS at the outlet from the SO<sub>2</sub>control device (or outlet of the steam generating unit if no SO<sub>2</sub>control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO<sub>2</sub>emission rate by using Method 6B of appendix A of this part. Fuel sampling shall be conducted pursuant to either paragraph (d)(1) or (d)(2) of this section. Method 6B of appendix A of this part shall be conducted pursuant to paragraph (d)(3) of this section.

(1) For affected facilities combusting coal or oil, coal or oil samples shall be collected daily in an as-fired condition at the inlet to the steam generating unit and analyzed for sulfur content and heat content according the Method 19 of appendix A of this part. Method 19 of appendix A of this part provides procedures for converting these measurements into the format to be used in calculating the average SO<sub>2</sub>input rate.

(2) As an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

(3) Method 6B of appendix A of this part may be used in lieu of CEMS to measure SO<sub>2</sub>at the inlet or outlet of the SO<sub>2</sub>control 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<sub>2</sub>and CO<sub>2</sub>measurement train operated at the candidate location and a second similar train operated according to the procedures in §3.2 and the applicable procedures in section 7 of Performance Specification 2 of appendix B of this part. Method 6B of appendix A of this part, Method 6A of appendix A of this part, or a combination of Methods 6 and 3 of appendix A of this part or Methods 6C and 3A of appendix A of this part are suitable measurement techniques. If Method 6B of appendix A of this part is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B of appendix A of this part 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent (0.10).

(e) The monitoring requirements of paragraphs (a) and (d) of this section shall not apply to affected facilities subject to §60.42c(h) (1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO<sub>2</sub> standards based on fuel supplier certification, as described under §60.48c(f), as applicable.

(f) The owner or operator of an affected facility operating a CEMS pursuant to paragraph (a) of this section, or conducting as-fired fuel sampling pursuant to paragraph (d)(1) of this section, shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive steam generating unit operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator.

#### **§ 60.47c Emission monitoring for particulate matter.**

(a) Except as provided in paragraphs (c), (d), (e), (f), and (g) of this section, the owner or operator of an affected facility combusting coal, oil, or wood that is subject to the opacity standards under §60.43c shall install, calibrate,

maintain, and operate a continuous opacity monitoring system (COMS) for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility subject to an opacity standard in §60.43c(c) and that is not required to install a COMS due to paragraphs (c), (d), (e), or (f) of this section that 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 §60.43c 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 §60.45c(a)(8).

(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) All COMS shall be operated in accordance with the applicable procedures under Performance Specification 1 of appendix B of this part. The span value of the opacity COMS shall be between 60 and 80 percent.

(c) Owners and operators of an affected facilities that burn only distillate oil that contains no more than 0.5 weight percent sulfur and/or liquid or gaseous fuels with potential sulfur dioxide emission rates of 26 ng/J (0.060 lb/MMBtu) heat input or less and that do not use a post-combustion technology to reduce SO<sub>2</sub> or PM emissions and that are subject to an opacity standard in §60.43c(c) are not required to operate a COMS if they follow the applicable procedures in §60.48c(f).

(d) Owners or operators complying with the PM emission limit by using a PM CEMS must calibrate, maintain, operate, and record the output of the system for PM emissions discharged to the atmosphere as specified in §60.45c(c). The CEMS specified in paragraph §60.45c(c) shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

(e) Owners and operators of an affected facility that is subject to an opacity standard in §60.43c(c) and that does not use post-combustion technology (except a wet scrubber) for reducing PM, SO<sub>2</sub>, or carbon monoxide (CO) emissions, burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur, and is operated such that emissions of CO discharged to the atmosphere from the affected facility are maintained at levels less than or equal to 0.15 lb/MMBtu on a boiler operating day average basis is not required to operate a COMS. Owners and operators of affected facilities electing to comply with this paragraph must demonstrate compliance according to the procedures specified in paragraphs (e)(1) through (4) of this section; or

(1) You must monitor CO emissions using a CEMS according to the procedures specified in paragraphs (e)(1)(i) through (iv) of this section.

(i) The CO CEMS must be installed, certified, maintained, and operated according to the provisions in §60.58b(i)(3) of subpart Eb of this part.

(ii) Each 1-hour CO emissions average is calculated using the data points generated by the CO CEMS expressed in parts per million by volume corrected to 3 percent oxygen (dry basis).

(iii) At a minimum, valid 1-hour CO emissions averages must be obtained for at least 90 percent of the operating hours on a 30-day rolling average basis. The 1-hour averages are calculated using the data points required in §60.13(h)(2).

(iv) Quarterly accuracy determinations and daily calibration drift tests for the CO CEMS must be performed in accordance with procedure 1 in appendix F of this part.

(2) You must calculate the 1-hour average CO emissions levels for each steam generating unit operating day by multiplying the average hourly CO output concentration measured by the CO CEMS times the corresponding average hourly flue gas flow rate and divided by the corresponding average hourly heat input to the affected source. The 24-hour average CO emission level is determined by calculating the arithmetic average of the hourly CO emission levels computed for each steam generating unit operating day.

(3) You must evaluate the preceding 24-hour average CO emission level each steam generating unit operating day excluding periods of affected source startup, shutdown, or malfunction. If the 24-hour average CO emission level is greater than 0.15 lb/MMBtu, you must initiate investigation of the relevant equipment and control systems within 24 hours of the first discovery of the high emission incident and, take the appropriate corrective action as soon as practicable to adjust control settings or repair equipment to reduce the 24-hour average CO emission level to 0.15 lb/MMBtu or less.

(4) You must record the CO measurements and calculations performed according to paragraph (e) of this section and any corrective actions taken. The record of corrective action taken must include the date and time during which the 24-hour average CO emission level was greater than 0.15 lb/MMBtu, and the date, time, and description of the corrective action.

(f) Owners and operators of an affected facility that is subject to an opacity standard in §60.43c(c) and that 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 is not required to operate a COMS.

(g) Owners and operators of an affected facility that is subject to an opacity standard in §60.43c(c) and that burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur and operates according to a written site-specific monitoring plan approved by the permitting authority is not required to operate a COMS. 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.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

**§ 60.48c Reporting and recordkeeping requirements.**

(a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by §60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §60.42c, or §60.43c.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

(4) Notification if an emerging technology will be used for controlling SO<sub>2</sub> emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

(b) The owner or operator of each affected facility subject to the SO<sub>2</sub> emission limits of §60.42c, or the PM or opacity limits of §60.43c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS and/or COMS using the applicable performance specifications in appendix B of this part.

(c) In addition to the applicable requirements in §60.7, the owner or operator of an affected facility subject to the opacity limits in §60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in paragraphs (c)(1) through (3) of this section, as applicable to the visible emissions monitoring method used.

(1) For each performance test conducted using Method 9 of appendix A–4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (c)(1)(i) through (iii) of this section.

(i) Dates and time intervals of all opacity observation periods;

(ii) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

(iii) Copies of all visible emission observer opacity field data sheets;

(2) For each performance test conducted using Method 22 of appendix A–4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (c)(2)(i) through (iv) of this section.

(i) Dates and time intervals of all visible emissions observation periods;

(ii) Name and affiliation for each visible emission observer participating in the performance test;

(iii) Copies of all visible emission observer opacity field data sheets; and

(iv) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the owner or operator to demonstrate compliance with the applicable monitoring requirements.

(3) For each digital opacity compliance system, the owner or operator shall maintain records and submit reports according to the requirements specified in the site-specific monitoring plan approved by the Administrator

(d) The owner or operator of each affected facility subject to the SO<sub>2</sub> emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall submit reports to the Administrator.

(e) The owner or operator of each affected facility subject to the SO<sub>2</sub> emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall keep records and submit reports as required under paragraph (d) of this section, including the following information, as applicable.

(1) Calendar dates covered in the reporting period.

(2) Each 30-day average SO<sub>2</sub> emission rate (ng/J or lb/MMBtu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.

(3) Each 30-day average percent of potential SO<sub>2</sub> emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of the corrective actions taken.

(4) Identification of any steam generating unit operating days for which SO<sub>2</sub> or diluent (O<sub>2</sub> or CO<sub>2</sub>) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.

(5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.

(6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

(7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.

(8) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS.

(9) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 of appendix B of this part.

(10) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.

(11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), (3), or (4) of this section, as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

(f) Fuel supplier certification shall include the following information:

(1) For distillate oil:

(i) The name of the oil supplier;

(ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c; and

(iii) The sulfur content or maximum sulfur content of the oil.

(2) For residual oil:

(i) The name of the oil supplier;

(ii) The location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility, or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility, or other location;

(iii) The sulfur content of the oil from which the shipment came (or of the shipment itself); and

(iv) The method used to determine the sulfur content of the oil.

(3) For coal:

(i) The name of the coal supplier;

(ii) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the sample was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected);

(iii) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and

(iv) The methods used to determine the properties of the coal.

(4) For other fuels:

(i) The name of the supplier of the fuel;

(ii) The potential sulfur emissions rate or maximum potential sulfur emissions rate of the fuel in ng/J heat input; and

(iii) The method used to determine the potential sulfur emissions rate of the fuel.

(g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

(2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO<sub>2</sub> standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

(3) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in §60.42C to use fuel certification to demonstrate compliance with the SO<sub>2</sub> standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

(h) The owner or operator of each affected facility subject to a federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under §60.42c or §60.43c shall calculate the annual capacity factor individually for each fuel combusted. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month.

(i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

(j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

## Attachment B – National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources [40 CFR Part 63, Subpart VVVVVV]

### Source Description and Location

Source Name:	Praxair, Inc.
Source Location:	2551 Dickey Road, East Chicago, Indiana 46312
County:	Lake
SIC Code:	2813
Operation Permit Renewal No.:	T 089-23333-00435
Operation Permit Renewal Issuance Date:	January 14, 2008
Significant Permit Modification No.:	089-28926-00435
Permit Reviewer:	Kimberly Cottrell

### NESHAP [40 CFR Part 63, Subpart VVVVVV]

#### Subpart VVVVVV—National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources

**Source:** 74 FR 56041, Oct. 29, 2009, unless otherwise noted.

#### Applicability and Compliance Dates

##### § 63.11494 What are the applicability requirements and compliance dates?

(a) Except as specified in paragraph (c) of this section, you are subject to this subpart if you own or operate a chemical manufacturing process unit (CMPU) that meets the conditions specified in paragraphs (a)(1) through (3) of this section.

(1) The CMPU uses as feedstocks, generates as byproducts, or produces as products any of the hazardous air pollutants (HAP) listed in Table 1 to this subpart (Table 1 HAP).

(2) The CMPU is located at an area source of HAP emissions.

(3) Table 1 HAP are present in feedstocks, or Table 1 HAP are generated or produced in the CMPU and are present in process fluid, at concentrations greater than 0.1 percent for carcinogens, as defined by the Occupational Safety and Health Administration at 29 CFR 1910.1200(d)(4), and greater than 1.0 percent for noncarcinogens. To determine the Table 1 HAP content of feedstocks, you may rely on formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet (MSDS) for the material. If the concentration in an MSDS is presented as a range, use the upper bound of the range.

(b) A CMPU includes all process vessels, equipment, and activities necessary to operate a chemical manufacturing process that produces a material or a family of materials described by North American Industry Classification System (NAICS) code 325. A CMPU consists of one or more unit operations and any associated recovery devices. A CMPU also includes each storage tank, transfer operation, surge control vessel, and bottoms receiver associated with the production of such NAICS code 325 materials.

(c) This subpart does not apply to the operations specified in paragraphs (c)(1) through (6) of this section.

(1) Affected sources under the following chemical manufacturing area source categories listed pursuant to Clean Air Act (CAA) section 112(c)(3) and 112(k)(3)(B)(ii) that are subject to area source standards under this part:

(i) Manufacture of Paint and Allied Products, subject to subpart CCCCCC of this part.

(ii) Mercury Emissions from Mercury Cell Chlor-Alkali Plants, subject to subpart IIIII of this part.

(iii) Polyvinyl Chloride and Copolymers Production, subject to subpart DDDDDD of this part.

(iv) Acrylic and Modacrylic Fibers Production, subject to subpart LLLLLL of this part.

- (v) Carbon Black Production, subject to subpart MMMMMM of this part.
- (vi) Chemical Manufacturing Area Sources: Chromium Compounds, subject to subpart NNNNNN of this part.
- (2) Production of the following chemical manufacturing materials described in NAICS code 325:
- (i) Manufacture of radioactive elements or isotopes, radium chloride, radium luminous compounds, strontium, uranium.
- (ii) Manufacture of photographic film, paper, and plate where the material is coated with or contains chemicals. This subpart does apply to the manufacture of photographic chemicals.
- (iii) Fabricating operations (such as spinning or compressing a solid polymer into its end use); compounding operations (in which blending, melting, and resolidification of a solid polymer product occurs for the purpose of incorporating additives, colorants, or stabilizers); and extrusion and drawing operations (converting an already produced solid polymer into a different shape by melting or mixing the polymer and then forcing it or pulling it through an orifice to create an extruded product). An operation is subject if it involves processing with Table 1 HAP solvent or if an intended purpose of the operation is to remove residual Table 1 HAP monomer.
- (iv) Manufacture of chemicals classified in NAICS code 325222, 325314, 325413, or 325998.
- (3) Research and development facilities, as defined in CAA section 112(c)(7).
- (4) Quality assurance/quality control laboratories.
- (5) Ancillary activities, as defined in §63.11502(b).
- (6) Metal HAP in structures or existing as articles as defined in 40 CFR 372.3.
- (d) This subpart applies to each new or existing affected source. The affected source is the facility-wide collection of CMPUs and each heat exchange system and wastewater system associated with a CMPU that meets the criteria specified in paragraphs (a) and (b) of this section. A CMPU using only Table 1 organic HAP is required to control only total CAA section 112(b) organic HAP. A CMPU using only Table 1 metal HAP is required to control only total CAA section 112(b) metal HAP.
- (1) An affected source is an existing source if you commenced construction or reconstruction of the affected source before October 6, 2008.
- (2) An affected source is a new source if you commenced construction or reconstruction of the affected source on or after October 6, 2008.
- (e) Any source that was a major source and installed a control device on a CMPU after November 15, 1990, and, as a result, became an area source under 40 CFR part 63 is required to obtain a permit under 40 CFR part 70 or 40 CFR part 71. Otherwise, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not otherwise required by law to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a). Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart.
- (f) If you own or operate an existing affected source, you must achieve compliance with the applicable provisions in this subpart no later than October 29, 2012.
- (g) If you start up a new affected source on or before October 29, 2009, you must achieve compliance with the applicable provisions of this subpart no later than October 29, 2009.
- (h) If you start up a new affected source after October 29, 2009, you must achieve compliance with the provisions in this subpart upon startup of your affected source.

## **Standards and Compliance Requirements**

### **§ 63.11495 What are the management practices and other requirements?**

(a) *Management practices.* If you have a CMPU subject to this subpart, you must comply with paragraphs (a)(1) through (5) of this section.

(1) Each process vessel in organic HAP service or metal HAP service must be equipped with a cover or lid that must be in place at all times when the vessel contains HAP, except for material addition and sampling.

(2) You must use any of the methods listed in paragraphs (a)(2)(i) through (iv) of this section to control total organic HAP emissions from transfer of liquids containing Table 1 organic HAP to tank trucks or railcars. You are not required to comply with this paragraph (a)(2) if you have notified the Administrator in your initial notification that a material is reactive or resinous, and you will not be able to comply with any of the methods in paragraphs (a)(2)(i) through (iv) of this section for the transfer of such material.

(i) Use submerged loading or bottom loading.

(ii) Route emissions to a fuel gas system or process in accordance with §63.982(d) of subpart SS.

(iii) Vapor balance back to the storage tank or another storage tank connected by a common header.

(iv) Vent through a closed-vent system to a control device.

(3) You must conduct inspections of process vessels and equipment for each CMPU in organic HAP service or metal HAP service at least quarterly to demonstrate compliance with these requirements and to determine that the process vessels and equipment are sound and free of leaks. For these inspections, detection methods incorporating sight, sound, or smell are acceptable. The inspection must include direct and proximal (thorough) inspection of all areas of potential leak within the CMPU. Indications of a leak identified using such method constitutes a leak unless you demonstrate that the indications of a leak are due to a condition other than loss of HAP. Alternatively, Method 21 of 40 CFR part 60, appendix A-7, with a leak definition of 500 parts per million by volume (ppmv), may be used for detection of leaks or to determine if the indications of a leak are due to a condition other than loss of HAP. If indications of a leak are determined not to be HAP in one quarterly monitoring period, you must still perform the inspection and demonstration in the next quarterly monitoring period. Inspections must be conducted while the subject CMPU is operating. No inspection is required in a calendar quarter during which the subject CMPU does not operate for the entire calendar quarter and is not in organic HAP service or metal HAP service. If the CMPU operates at all during a calendar quarter, an inspection is required.

(4) You must repair any leak within 15 calendar days after detection of the leak, or document the reason for any delay of repair. For the purposes of this paragraph (a)(4), a leak will be considered "repaired" if a condition specified in paragraph (a)(4)(i), (ii), or (iii) of this section is met.

(i) The visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated, or

(ii) No bubbles are observed at potential leak sites during a leak check using soap solution, or

(iii) The system will hold a test pressure.

(5) You must keep records of the dates and results of each inspection event, the dates of equipment repairs, and, if applicable, the reasons for any delay in repair.

(b) *Small heat exchange systems.* For each heat exchange system subject to this subpart with a cooling water flow rate less than 8,000 gallons per minute (gal/min) and not meeting one or more of the conditions in §63.104(a), you must comply with paragraphs (b)(1) through (3) of this section, or as an alternative, you may comply with any one of the requirements in Item 1.a or 1.b of Table 8 to this subpart.

(1) You must develop and operate in accordance with a heat exchange system inspection plan. The plan must describe the inspections to be performed that will provide evidence of hydrocarbons in the cooling water. Among other things, inspections may include checks for visible floating hydrocarbon on the water, hydrocarbon odor, discolored water, and/or chemical addition rates. You must conduct inspections at least once per quarter, even if the previous inspection determined that the indications of a leak did not constitute a leak as defined by §63.104(b)(6).

(2) You must perform repairs to eliminate the leak and any indications of a leak or demonstrate that the HAP concentration in the cooling water does not constitute a leak, as defined by §63.104(b)(6), within 45 calendar days after indications of the leak are identified, or you must document the reason for any delay of repair in your next semiannual compliance report.

(3) You must keep records of the dates and results of each inspection, documentation of any demonstrations that indications of a leak do not constitute a leak, the dates of leak repairs, and, if applicable, the reasons for any delay in repair.

(c) Startup, shutdown, and malfunction (SSM) provisions in subparts that are referenced in paragraphs (a) and (b) of this section do not apply.

### **§ 63.11496 What are the standards and compliance requirements for process vents?**

(a) *Organic HAP emissions from batch process vents.* You must comply with the requirements in paragraphs (a)(1) through (4) of this section for organic HAP emissions from your batch process vents for each CMPU using Table 1 organic HAP. If uncontrolled organic HAP emissions from all batch process vents from a CMPU subject to this subpart are equal to or greater than 10,000 pounds per year (lb/yr), you must also comply with the emission limits and other requirements in Table 2 to this subpart.

(1) You must determine the sum of actual organic HAP emissions from all of your batch process vents within a CMPU subject to this subpart using process knowledge, engineering assessment, or test data. Emissions for a standard batch in a process may be used to represent actual emissions from each batch in that process. You must maintain records of the calculations. Calculations of annual emissions are not required if you meet the emission standards for batch process vents in Table 2 to this subpart.

(2) As an alternative to calculating actual emissions for each affected CMPU at your facility, you may elect to estimate emissions for each CMPU based on the emissions for the worst-case CMPU. The worst-case CMPU means the CMPU at the affected source with the highest organic HAP emissions per batch. The worst-case emissions per batch are used with the number of batches run for other affected CMPU. Process knowledge, engineering assessment, or test data may be used to identify the worst-case process. You must keep records of the information and procedures used to identify the worst-case process.

(3) If your current estimate is that emissions from batch process vents from a CMPU are less than 10,000 pounds per year (lb/yr), then you must keep a record of the number of batches of each process operated per month. Also, you must reevaluate your total emissions from batch process vents prior to making any process changes that affect emission calculations in paragraphs (a)(1) and (2) of this section. If projected emissions increase to 10,000 lb/yr or more, you must be in compliance options for batch process vents in Table 2 to this subpart upon initiating operation under the new operating conditions. You must maintain records documenting the results of all updated emissions calculations.

(4) As an alternative to determining the HAP emissions, you may elect to demonstrate that the amount of organic HAP used in the process is less than 10,000 lb/yr. You must keep monthly records of the organic HAP usage.

(b) *Organic HAP emissions from continuous process vents.* You must comply with the requirements in paragraphs (b)(1) through (3) of this section for organic HAP emissions from your continuous process vents for each CMPU subject to this subpart using Table 1 organic HAP. If the total resource-effectiveness (TRE) index value for a continuous process vent is less than or equal to 1.0, you must also comply with the emission limits and other requirements in Table 3 to this subpart.

(1) You must determine the TRE index value according to the procedures in §63.115(d), except as specified in paragraphs (b)(1)(i) through (iii) of this section.

(i) You are not required to calculate the TRE index value if you control emissions in accordance with Table 3 to this subpart.

(ii) Sections 63.115(d)(1)(i) and (ii) are not applicable for the purposes of this paragraph (b)(1)(ii).

(iii) You may assume the TRE for a vent stream is  $> 1.0$  if the amount of organic HAP emitted in the vent stream is less than 0.1 pound per hour.

(2) If the current TRE index value is greater than 1, you must recalculate the TRE index value before you make any process or operational change that affects parameters in the calculation. If the recalculated TRE is less than or equal to 1.0, then you must comply with one of the compliance options for continuous process vents in Table 3 to this subpart before operating under the new operating conditions. You must maintain records of all TRE calculations.

(3) If a recovery device as defined in §63.11502 is used to maintain the TRE index value at a level greater than 1.0 and less than or equal to 4.0, you must comply with §63.982(e) and the requirements specified therein.

(c) *Combined streams.* If you combine organic HAP emissions from batch process vents and continuous process vents, you must comply with the more stringent standard in Table 2 or Table 3 to this subpart that applies to any portion of the combined stream, or you must comply with Table 2 for the batch process vents and Table 3 for the continuous process vents. The TRE index value for continuous process vents and the annual emissions from batch process vents shall be determined for the individual streams before they are combined, and prior to any control, in order to determine the most stringent applicable requirements.

(d) *Combustion of halogenated streams.* If you use a combustion device to comply with the emission limits for organic HAP from a halogenated batch process vent or a halogenated continuous process vent, you must use a halogen reduction device to meet the emission limit in either paragraph (d)(1) or (d)(2) of this section and in accordance with §63.994 and the requirements referenced therein.

(1) Reduce overall emissions of hydrogen halide and halogen HAP after the combustion device by greater than or equal to 95 percent, to less than or equal to 0.45 kilograms per hour (kg/hr), or to a concentration less than or equal to 20 parts per million by volume (ppmv).

(2) Reduce the halogen atom mass emission rate before the combustion device to less than or equal to 0.45 kg/hr or to a concentration less than or equal to 20 ppmv.

(e) *Alternative standard for organic HAP.* Exceptions to the requirements for the alternative standard requirements specified in Tables 2 and 3 to this subpart and §63.2505 are specified in paragraphs (e)(1) through (5) of this section.

(1) When §63.2505 of subpart FFFF refers to Tables 1 and 2 to subpart FFFF and §§63.2455 and 63.2460, it means Tables 2 and 3 to this subpart and §63.11496(a) and (b).

(2) Sections 63.2505(a)(2) and (b)(9) do not apply.

(3) When §63.2505(b) references §63.2445 it means §63.11494(f) through (h).

(4) The requirements for hydrogen halide and halogen HAP apply only to hydrogen halide and halogen HAP generated in a combustion device that is used to comply with the alternative standard.

(5) When §63.1258(b)(5)(ii)(B)( 2 ) refers to a "notification of process change" report, it means the semi-annual compliance report required by §63.11501(d) for the purposes of this subpart.

(f) *Emissions from metal HAP process vents.* You must comply with the requirements in paragraphs (f)(1) and (2) of this section for metal HAP emissions from each CMPU using Table 1 metal HAP. If the collective uncontrolled metal HAP emissions from all metal HAP process vents from a CMPU are equal to or greater than 400 lb/yr, then you must also comply with the emission limits and other requirements in Table 4 to this subpart and in paragraph (f)(3), (4), or (5) of this section.

(1) You must determine the sum of metal HAP emissions from all metal HAP process vents within a CMPU subject to this subpart, except you are not required to determine the annual emissions if you control the metal HAP process vents within a CMPU in accordance with Table 4 to this subpart or if you determine your total metal HAP usage in the process unit is less than 400 lb/yr. To determine the mass emission rate you may use process knowledge, engineering assessment, or test data. You must keep records of the emissions calculations.

(2) If your current estimate is that total uncontrolled metal HAP emissions from a CMPU subject to this subpart are less than 400 lb/yr, then you must keep records of either the number of batches operated per month (batch vents) or the process operating hours (continuous vents). Also, you must reevaluate your total emissions before you make any process or operational change that affects emissions of metal HAP. If projected emissions increase to 400 lb/yr or more, then you must be in compliance with one of the options for metal HAP process vents in Table 4 to this subpart upon initiating operation under the new operating conditions. You must keep records of all recalculated emissions determinations.

(3) If you have an existing source subject to the HAP metals emission limits specified in Table 4 to this subpart, you must comply with the initial compliance and monitoring requirements in paragraphs (f)(3)(i) through (iii) of this section. You must keep records of monitoring results to demonstrate continuous compliance.

(i) You must prepare a monitoring plan containing the information in paragraphs (f)(3)(i)(A) through (E) of this section. The plan must be maintained on-site and be available on request. You must operate and maintain the control device according to a site-specific monitoring plan at all times.

(A) A description of the device;

(B) Results of a performance test or engineering assessment conducted in accordance with paragraph (f)(3)(ii) of this section verifying the performance of the device for reducing HAP metals or particulate matter (PM) to the levels required by this subpart;

(C) Operation and maintenance plan for the control device (including a preventative maintenance schedule consistent with the manufacturer's instructions for routine and long-term maintenance) and continuous monitoring system.

(D) A list of operating parameters that will be monitored to maintain continuous compliance with the applicable emissions limits; and

(E) Operating parameter limits based on either monitoring data collected during the performance test or established in the engineering assessment.

(ii) You must conduct a performance test or an engineering assessment for each CMPU subject to a HAP metals emissions limit in Table 4 to this subpart and report the results in your Notification of Compliance Status (NOCS) report. If you own or operate an existing affected source, you are not required to conduct a performance test if a prior performance test was conducted within the 5 years prior to the effective date using the same methods specified in paragraph (f)(3)(iii) of this section and either no process changes have been made since the test, or if you can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process changes. For each performance test, sampling must be conducted at both the inlet and outlet of the control device, and the test must be conducted under representative process operating conditions.

(iii) If you elect to conduct a performance test, it must be conducted according to requirements in §63.11410(j)(1). As an alternative to conducting a performance test using Method 5 or 5D to determine the concentration of PM, you may use Method 29 in 40 CFR part 60, appendix A-8 to determine the concentration of HAP metals. You have demonstrated initial compliance if the overall reduction of either HAP metals or total PM is equal to or greater than 95 percent.

(4) If you have a new source using a baghouse as a control device, you must install, operate, and maintain a bag leak detection system on all baghouses used to comply with the HAP metals emissions limit in Table 4 to this subpart. You must comply with the testing, monitoring, and recordkeeping requirements in §63.11410(g), (i), and (j)(1), except you are not required to submit the monitoring plan required by §63.11410(g)(2) for approval.

(5) If you have a new source using a control device other than a baghouse to comply with the HAP metals emission limits in Table 4 to this subpart, you must comply with the initial compliance and monitoring requirements in paragraphs (f)(3)(i) through (iii) of this section.

(g) *Exceptions and alternatives to 40 CFR part 63, subpart SS.* If you are complying with the emission limits and other requirements for continuous process vents in Table 3 to this subpart, the provisions in paragraphs (g)(1) through (7) and (9) of this section apply in addition to the provisions in 40 CFR part 63, subpart SS. If you are complying with the emission limits and other requirements for batch process vents in Table 2 to this subpart, the provisions in paragraphs (g)(1) through (8) of this section apply in addition to the provisions in subpart SS.

(1) *Requirements for performance tests.* The requirements specified in §§63.2450(g)(1) through (4) apply instead of or in addition to the requirements specified in 40 CFR part 63, subpart SS.

(2) *Design evaluation.* To determine initial compliance with a percent reduction emission limit, you may elect to conduct a design evaluation as specified in §63.1257(a)(1) instead of a performance test as specified in subpart SS of this part 63. You must establish the value(s) and basis for the operating limits as part of the design evaluation. For continuous process vents, the design evaluation must be conducted at maximum representative operating conditions for the process, unless the Administrator specifies or approves alternate operating conditions. For batch process vents, the design evaluation must be conducted under worst-case conditions, as specified in §63.2460(c)(2).

(3) *Outlet concentration correction for combustion devices.* When §63.997(e)(2)(iii)(C) requires you to correct the measured concentration at the outlet of a combustion device to 3 percent oxygen if you add supplemental combustion air, the requirements in either paragraph (g)(3)(i) or (g)(3)(ii) of this section apply for the purposes of this subpart.

(i) You must correct the concentration in the gas stream at the outlet of the combustion device to 3 percent oxygen if you add supplemental gases, as defined in §63.2550, to the vent stream, or;

(ii) You must correct the measured concentration for supplemental gases using Equation 1 of §63.2460; you may use process knowledge and representative operating data to determine the fraction of the total flow due to supplemental gas.

(4) *Continuous parameter monitoring.* The provisions in §63.2450(k)(1) through (6) apply in addition to the requirements for continuous parameter monitoring systems (CPMS) in subpart SS of this part 63, except as specified in paragraphs (g)(4)(i) and (ii) of this section.

(i) You may measure pH at least once per day for any halogen scrubber within a CMPU subject to this rule.

(ii) The requirements in §63.2450(k)(6) to request approval of a procedure to monitor operating parameters does not apply for the purposes of this subpart. You must provide the required information in your NOCS report required by §63.11501(b).

(5) *Startup, shutdown, malfunction (SSM).* Section 63.998(b)(2)(iii), (b)(6)(i)(A), and (d)(3) do not apply for the purposes of this subpart.

(6) *Excused excursions.* Excused excursions, as defined in subpart SS of this part 63, are not allowed.

(7) *Energetics and organic peroxides.* If an emission stream contains energetics or organic peroxides that, for safety reasons, cannot meet an applicable emission limit specified in this subpart, then you must submit an application to the Administrator explaining why an undue safety hazard would be created if the air emission controls were installed, and you must describe the procedures that you will implement to minimize HAP emissions from these vent streams in lieu of the emission limitations in this section.

(8) *Additional requirements for batch process vents.* The provisions specified in §63.2460(c) apply in addition to the provisions in subpart SS of this part 63, except as specified in paragraphs (g)(8)(i) through (iii) of this section.

(i) References to emission limits in Table 2 to subpart FFFF mean the emission limits in Table 2 to this subpart.

(ii) References to MCPU mean CMPU for purposes of this subpart.

(iii) Section 63.2460(c)(8) does not apply for the purposes of this subpart.

(9) *Parameter monitoring averaging periods.* Daily averages required in §63.998(b)(3) apply at all times except during startup and shutdown. Separate averages shall be determined for each period of startup and period of shutdown.

(h) *Surge control vessels and bottoms receivers.* For each surge control vessel and bottoms receiver that meets the applicability criteria for storage tanks specified in Table 5 to this subpart, you must meet the emission limits and control requirements specified in Table 5 to this subpart.

(i) *Startup, shutdown, and malfunction (SSM).* References to SSM provisions in subparts that are referenced in paragraphs (a) through (h) of this section or Tables 2 through 5 to this subpart do not apply.

### **§ 63.11497 What are the standards and compliance requirements for storage tanks?**

(a) You must comply with the emission limits and other requirements in Table 5 to this subpart and in paragraph (b) of this section for organic HAP emissions from each of your storage tanks that meet the applicability criteria in Table 5 to this subpart.

(b) *Planned routine maintenance for a control device.* Operate in accordance with paragraphs (b)(1) through (3) of this section for periods of planned routine maintenance of a control device for storage tanks.

(1) Add no material to the storage tank during periods of planned routine maintenance.

(2) Limit periods of planned routine maintenance for each control device (or series of control devices) to no more than 240 hours per year (hr/yr), or submit an application to the Administrator requesting an extension of this time limit to a total of 360 hr/yr. The application must explain why the extension is needed and it must be submitted at least 60 days before the 240-hour limit will be exceeded.

(3) Keep records of the day and time at which planned routine maintenance periods begin and end, and keep a record of the type of maintenance performed.

(c) References to SSM provisions in subparts that are referenced in paragraphs (a) or (b) of this section or Table 5 to this subpart do not apply.

**§ 63.11498 What are the standards and compliance requirements for wastewater systems?**

(a) You must comply with the requirements in paragraph (a)(1) and (2) of this section and in Table 6, Item 1 to this subpart for all wastewater streams from a CMPU subject to this subpart. If the partially soluble HAP concentration in a wastewater stream is equal to or greater than 10,000 parts per million by weight (ppmw) and the wastewater stream contains a separate organic phase, then you must also comply with Table 6, Item 2 to this subpart for that wastewater stream. Partially soluble HAP are listed in Table 7 to this subpart.

(1) Except as specified in paragraph (a)(2) of this section, you must determine the total concentration of partially soluble HAP in each wastewater stream using process knowledge, engineering assessment, or test data. Also, you must reevaluate the concentration of partially soluble HAP if you make any process or operational change that affects the concentration of partially soluble HAP in a wastewater stream.

(2) You are not required to determine the partially soluble concentration in wastewater that is hard piped to a combustion unit or hazardous waste treatment unit, and you are not required to determine the partially soluble HAP concentration in wastewater that is hard piped to a storage tank from which the wastewater is collected and shipped offsite for treatment in a combustion unit or hazardous waste treatment unit.

(3) Separated organic material that is recycled to a process is no longer wastewater and no longer subject to the wastewater requirements after it has been recycled.

(b) The requirements in Item 2 of Table 6 to this subpart do not apply during periods of startup or shutdown. References to SSM provisions in subparts that are referenced in paragraph (a) of this section or Table 6 to this subpart do not apply.

**§ 63.11499 What are the standards and compliance requirements for heat exchange systems?**

(a) If the cooling water flow rate in your heat exchange system is equal to or greater than 8,000 gal/min and is not meeting one or more of the conditions in §63.104(a), then you must comply with one of the requirements specified in Table 8 to this subpart.

(b) For equipment that meets Current Good Manufacturing Practice (CGMP) requirements of 21 CFR part 211, you may use the physical integrity of the reactor as the surrogate indicator of heat exchanger system leaks when complying with Item 1.a in Table 8 to this subpart.

(c) Any reference to SSM provisions in other subparts that are referenced in paragraphs (a) and (b) of this section or Table 8 to this subpart do not apply.

**§ 63.11500 What compliance options do I have if part of my plant is subject to both this subpart and another Federal standard?**

For any CMPU, heat exchange system, or wastewater system subject to the provisions of both this subpart and another rule, you may elect to comply only with the more stringent provisions as specified in paragraphs (a) through (d) of this section. You must consider all provisions of the rules, including monitoring, recordkeeping, and reporting. You must identify the subject CMPU, heat exchange system, and/or wastewater system, and the provisions with which you will comply in your NOCS report required by §63.11501(b). You also must demonstrate in your NOCS report that each provision with which you will comply is at least as stringent as the otherwise applicable requirement in this subpart VVVVVV. You are responsible for making accurate determinations concerning the more stringent standards and noncompliance with this rule is not excused if it is later determined that your determination was in error and, as a result, you are violating this subpart. Compliance with this rule is your responsibility and the NOCS report does not alter or affect that responsibility.

(a) *Compliance with other subparts of this part 63.* If any part of a CMPU that is subject to the provisions of this subpart is also subject to the provisions of another subpart of 40 CFR part 63, then compliance with any of the requirements in the other subpart of this part 63 that are at least as stringent as the corresponding requirements in this subpart VVVVVV constitutes compliance with this subpart VVVVVV.

(b) *Compliance with subparts of 40 CFR part 60.* If any part of a CMPU that is subject to the provisions of this subpart is also subject to the provisions of subpart VV, DDD, III, NNN, RRR, or YYY in 40 CFR part 60, then compliance with any of the requirements in 40 CFR part 60, subpart VV, DDD, III, NNN, RRR, or YYY that are at least as stringent as the corresponding requirements in this subpart VVVVVV constitutes compliance with this subpart VVVVVV.

(c) *Compliance with subparts of 40 CFR part 61.* If any part of a CMPU that is subject to the provisions of this subpart is also subject to the provisions of subpart V, Y, BB, or FF of 40 CFR part 61, then compliance with any of the requirements in 40 CFR part 61, subpart V, Y, BB, or FF that are at least as stringent as the corresponding requirements in this subpart VVVVVV constitutes compliance with this subpart VVVVVV.

(d) *Compliance with 40 CFR parts 260 through 272.* If any part of a CMPU that is subject to the provisions of this subpart is also subject to the provisions of 40 CFR parts 260 through 272, then compliance with any of the requirements in 40 CFR part 260 through 272 rule that are at least as stringent as the corresponding requirements in this subpart VVVVVV constitutes compliance with this subpart VVVVVV.

### **§ 63.11501 What are the notification, recordkeeping, and reporting requirements?**

(a) *General provisions.* You must meet the requirements of the General Provisions in 40 CFR part 63, subpart A, as shown in Table 9 to this subpart. The General Provisions in other parts do not apply except when a requirement in an overlapping standard, which you determined is at least as stringent as subpart VVVVVV and with which you have opted to comply, requires compliance with general provisions in another part.

(b) *Notification of compliance status (NOCS).* Your NOCS required by §63.9(h) must include the following additional information as applicable:

(1) This certification of compliance, signed by a responsible official:

(i) "This facility complies with the management practices in §63.11495."

(ii) "This facility complies with the requirements in §63.11496 for HAP emissions from process vents."

(iii) "This facility complies with the requirements in §63.11496 and §63.11497 for surge control vessels, bottoms receivers, and storage tanks."

(iv) "This facility complies with the requirements in §63.11498 to treat wastewater streams."

(v) "This facility complies with the requirements in §63.11499 for heat exchange systems."

(2) If you comply with the alternative standard as specified in Table 2 to this subpart or Table 3 to this subpart, include the information specified in §63.1258(b)(5), as applicable.

(3) If you establish an operating limit for a parameter that will not be monitored continuously in accordance with §§63.11496(g)(4) and 63.2450(k)(6), provide the information as specified in §§63.11496(g)(4) and 63.2450(k)(6).

(4) A list of all transferred liquids that are reactive or resinous materials, as defined in §63.11502(b).

(5) If you comply with provisions in an overlapping rule in accordance with §63.11500, identify the affected CMPU, heat exchange system, and/or wastewater system; provide a list of the specific provisions with which you will comply; and demonstrate that the provisions with which you will comply are at least as stringent as the otherwise applicable requirements, including monitoring, recordkeeping, and reporting requirements, in this subpart VVVVVV.

(c) *Recordkeeping.* You must maintain files of all information required by this subpart for at least 5 years following the date of each occurrence according to the requirements in §63.10(b)(1). If you are subject, you must comply with the recordkeeping requirements of §63.10(b)(2) and the applicable requirements specified in paragraphs (c)(1) through (7) of this section.

(1) For each CMPU subject to this subpart you must keep the records specified in paragraphs (c)(1)(i) through (vi) of this section, as applicable.

(i) Records of management practice inspections, repairs, and reasons for any delay of repair, as specified in §63.11495(a)(5).

(ii) Records of small heat exchange system inspections, demonstrations of indications of leaks that do not constitute leaks, repairs, and reasons for any delay in repair as specified in §63.11495(b).

(iii) If batch process vent emissions are less than 10,000 lb/yr for a CMPU, records of batch process vent emission calculations, as specified in §63.11496(a)(1), the number of batches operated each month, as specified in §63.11496(a)(3), and any updated emissions calculations, as specified in §63.11496(a)(3). Alternatively, keep records of the worst-case processes or organic HAP usage, as specified in §63.11496(a)(2) and (4), respectively.

(iv) Records of all TRE calculations for continuous process vents as specified in §63.11496(b)(2).

(v) Records of metal HAP emission calculations as specified in §63.11496(f)(1) and (2). If total uncontrolled metal HAP process vent emissions from a CMPU subject to this subpart are estimated to be less than 400 lb/yr, also keep records of either the number of batches per month or operating hours, as specified in §63.11496(f)(2).

(vi) Records identifying wastewater streams and the type of treatment they receive, as specified in Table 6 to this subpart.

(2) For batch process vents subject to Table 2 to this subpart and continuous process vents subject to Table 3 to this subpart, you must keep records specified in paragraphs (c)(2)(i) or (ii) of this section, as applicable.

(i) If you route emissions to a control device other than a flare, keep records of performance tests, if applicable, as specified in §63.998(a)(2)(ii) and (4), keep records of the monitoring system and the monitored parameters, as specified in §63.998(b) and (c), and keep records of the closed-vent system, as specified in §63.998(d)(1). If you use a recovery device to maintain the TRE above 1.0 for a continuous process vent, keep records of monitoring parameters during the TRE index value determination, as specified in §63.998(a)(3).

(ii) If you route emissions to a flare, keep records of the flare compliance assessment, as specified in §63.998(a)(1)(i), keep records of the pilot flame monitoring, as specified in §63.998(a)(1)(ii) and (iii), and keep records of the closed-vent system, as specified in §63.998(d)(1).

(3) For metal HAP process vents subject to Table 4 to this subpart, you must keep records specified in paragraphs (c)(3)(i) or (ii) of this section, as applicable.

(i) For a new source using a control device other than a baghouse and for any existing source, maintain a monitoring plan, as specified in §63.11496(f)(3)(i), and keep records of monitoring results, as specified in §63.11496(f)(3).

(ii) For a new source using a baghouse to control metal HAP emissions, keep a site-specific monitoring plan, as specified in §§63.11496(f)(4) and 63.11410(g), and keep records of bag leak detection systems, as specified in §§63.11496(f)(4) and 63.11410(g)(4).

(4) For each storage tank subject to Table 5 to this subpart, you must keep records specified in paragraphs (c)(4)(i) through (vi) of this section, as applicable.

(i) Keep records of the vessel dimension, capacity, and liquid stored, as specified in §63.1065(a).

(ii) Keep records of each inspection of an internal floating roof, as specified in §63.1065(b)(1).

(iii) Keep records of each seal gap measurement for external floating roofs, as specified in §63.1065(b)(2), and keep records of inspections of external floating roofs, as specified in §63.1065(b)(1).

(iv) If you vent emissions to a control device other than a flare, keep records of the operating plan and measured parameter values, as specified in §§63.985(c) and 63.998(d)(2).

(v) If you vent emissions to a flare, keep records of all periods of operation during which the flare pilot flame is absent, as specified in §§63.987(c) and 63.998(a)(1), and keep records of closed-vent systems, as specified in §63.998(d)(1).

(vi) For periods of planned routine maintenance of a control device, keep records of the day and time at which each maintenance period begins and ends, and keep records of the type of maintenance performed, as specified in §63.11497(b)(3).

(5) For each wastewater stream subject to Item 2 in Table 6 to this subpart, keep records of the wastewater stream identification and the disposition of the organic phase(s), as specified in Item 2 to Table 6 to this subpart.

(6) For each large heat exchange system subject to Table 8 to this subpart, you must keep records of detected leaks; the date the leak was detected; if demonstrated not to be a leak, the basis for that determination; the date of efforts to repair the leak; and the date the leak is repaired, as specified in Table 8 to this subpart.

(7) You must keep a record of all transferred liquids that are reactive or resinous materials, as defined in §63.11502(b), and not included in the NOCS.

(d) *Semiannual Compliance Reports.* You must submit semiannual compliance reports that contain the information specified in paragraphs (d)(1) through (7) of this section, as applicable. Reports are required only for semiannual periods during which you experienced any of the events described in paragraphs (d)(1) through (7) of this section.

(1) *Deviations.* You must clearly identify any deviation from the requirements of this subpart.

(2) *Delay of repair for a large heat exchange system.* You must include the information specified in §63.104(f)(2) each time you invoke the delay of repair provisions for a heat exchange system with a cooling water flow rate equal to or greater than 8,000 gal/min.

(3) *Delay of leak repair.* You must provide the following information for each delay of leak repair beyond 15 days for any process equipment, storage tank, surge control vessel, bottoms receiver, and each delay of leak repair beyond 45 days for any heat exchange system with a cooling water flow rate less than 8,000 gal/min: information on the date the leak was identified, the reason for the delay in repair, and the date the leak was repaired.

(4) *Process change.* You must report each process change that affects a compliance determination and submit a new certification of compliance with the applicable requirements in accordance with the procedures specified in paragraph (b) of this section.

(5) *Data for the alternative standard.* If you comply with the alternative standard, as specified in Table 2 to this subpart or Table 3 to this subpart, report the information required in §63.1258(b)(5).

(6) *Overlapping rule requirements.* Report any changes in the overlapping provisions with which you comply.

(7) *Reactive and resinous materials.* Report any transfer of liquids that are reactive or resinous materials, as defined in §63.11502(b), and not included in the NOCS.

#### **Other Requirements and Information**

##### **§ 63.11502 What definitions apply to this subpart?**

(a) The following terms used in this subpart have the meaning given them in the CAA, §63.2, subpart SS (§63.981), subpart WW (§63.1061), 40 CFR 60.111b, subpart F (§63.101), subpart G (§63.111), subpart FFFF (§63.2550), as specified after each term:

Administrator (§63.2)

Article (40 CFR 372.3)

Boiler (§63.111)

Bottoms receiver (§63.2550)

CAA (§63.2)

Closed-vent system (§63.981)

Combustion device (§63.111)

Commenced (§63.2)

Compliance date (§63.2)

Container (§63.111)

Continuous monitoring system (§63.2)

Distillation unit (§63.111)

Emission standard (§63.2)

EPA (§63.2)

Family of materials (§63.2550)

Fill or filling (§63.111)

Floating roof (§63.1061)

Fuel gas system (§63.981)

Halogen atoms (§63.2550)

Halogenated vent stream (§63.2550)

Halogens and hydrogen halides (§63.2550)

Hazardous air pollutant (§63.2)

Heat exchange system (§63.101)

Incinerator (§63.111)

Maintenance wastewater (§63.2550)

Major source (§63.2)

Maximum true vapor pressure (§63.111)

Oil-water separator or organic-water separator (§63.111)

Operating permit (§63.101)

Owner or operator (§63.2)

Performance test (§63.2)

Permitting authority (§63.2)

Process condenser (§63.2550)

Process heater (§63.111)

Process tank (§63.2550)

Process wastewater (§63.101)

Reactor (§63.111)

Responsible official (§63.2)

State (§63.2)

Supplemental gases (§63.2550)

Surge control vessel (§63.2550)

Test method (§63.2)

Unit operation (§63.101)

(b) All other terms used in this subpart shall have the meaning given them in this section. If a term is defined in the CAA, §63.2, subpart SS (§63.981), subpart WW (§63.1061), 40 CFR 60.111b, subpart F (§63.101), subpart G (§63.111), or subpart FFFF (§63.2550), and in this section, it shall have the meaning given in this section for purposes of this subpart.

*Ancillary activities* means boilers, incinerators, and process heaters not used to comply with the emission standards in §§63.11495 through 63.11500, chillers and other refrigeration systems, and other equipment and activities that are not directly involved (i.e., they operate within a closed system and materials are not combined with process fluids) in the processing of raw materials or the manufacturing of a product or intermediates used in the production of the product.

*Batch process vent* means a vent from a CMPU or vents from multiple CMPUs within a process that are manifolded together into a common header, through which a HAP-containing gas stream is, or has the potential to be, released to the atmosphere. Batch process vents include vents with intermittent flow from continuous operations that are not combined with any stream that originated as a continuous gas stream from the same continuous process. Examples of batch process vents include, but are not limited to, vents on condensers used for product recovery, reactors, filters, centrifuges, and process tanks. The following are not batch process vents for the purposes of this subpart:

- (1) Continuous process vents;
- (2) Bottoms receivers;
- (3) Surge control vessels;
- (4) Gaseous streams routed to a fuel gas system(s);
- (5) A gas stream routed to other processes for reaction or other use in another process (i.e., for chemical value as a product, isolated intermediate, byproduct, or coproduct, or for heat value).
- (6) Vents on storage tanks or wastewater systems;
- (7) Drums, pails, and totes; and
- (8) Emission streams from emission episodes that are undiluted and uncontrolled containing less than 50 ppmv HAP are not part of any batch process vent. The HAP concentration may be determined using any of the following: process knowledge, an engineering assessment, or test data.

*Byproduct* means a chemical (liquid, gas, or solid) that is produced coincidentally during the production of the product.

*Chemical manufacturing process* means all equipment which collectively functions to produce a product or isolated intermediate. A process includes, but is not limited to any, all, or a combination of reaction, recovery, separation, purification, or other activity, operation, manufacture, or treatment which are used to produce a product or isolated intermediate. A process is also defined by the following:

- (1) Routine cleaning operations conducted as part of batch operations are considered part of the process;
- (2) Each nondedicated solvent recovery operation is considered a single process;
- (3) Each nondedicated formulation operation is considered a single process;
- (4) Quality assurance/quality control laboratories are not considered part of any process;
- (5) Ancillary activities are not considered a process or part of any process; and
- (6) The end of a process that produces a solid material is either up to and including the dryer or extruder, or for a polymer production process without a dryer or extruder, it is up to and including the die plate or solid-state reactor, except in two cases. If the dryer, extruder, die plate, or solid-state reactor is followed by an operation that is designed and operated to remove HAP solvent or residual monomer from the solid, then the solvent removal operation is the last step in the process. If the dried solid is diluted or mixed with a HAP-based solvent, then the solvent removal operation is the last step in the process.

*Continuous process vent* means a "process vent" as defined in §63.101 in subpart F of this part, except:

- (1) The reference in §63.107(e) to a chemical manufacturing process unit that meets the criteria of §63.100(b) means a CMPU that meets the criteria of §63.11494(a) and (b);
- (2) The reference in §63.107(h)(2) to subpart H means §63.11495(a) for the purposes of this subpart;

- (3) The reference in §63.107(h)(4) to §63.113 means Tables 2 and 3 to this subpart;
- (4) The reference in §63.107(h)(7) to §63.119 means Table 5 to this subpart, and the reference to §63.126 does not apply for the purposes of this subpart;
- (5) The second sentence in the definition of “process vent” in §63.101 does not apply for the purposes of this subpart;
- (6) The references to an “air oxidation reactor, distillation unit, or reactor” in §63.107 means any continuous operation for the purposes of this subpart;
- (7) Section §63.107(h)(8) does not apply for the purposes of this subpart; and
- (8) A separate determination is required for the emissions from each CMPU, even if emission streams from two or more CMPU are combined prior to discharge to the atmosphere or to a control device.

*Co-Product* means a chemical that is produced during the production of another chemical, both for their intended production.

*Deviation* means any instance in which an affected source subject to this subpart, or an owner or operator of such a source fails to meet any requirement or obligation established by this subpart, including, but not limited to any emissions limitation or management practice; or fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit.

*Equipment* means each pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, and instrumentation system in or associated with a CMPU.

*Feedstock* means any raw material, reactant, solvent, additive, or other material introduced to a CMPU.

*In metal HAP service* means that a process vessel or piece of equipment either contains or contacts a feedstock, byproduct, or product that contains metal HAP.

*In organic HAP service* means that a process vessel or piece of equipment either contains or contacts a feedstock, byproduct, or product that contains an organic HAP.

*Metal HAP* means the compounds containing metals listed as HAP in section 112(b) of the CAA.

*Metal HAP process vent* means the point of discharge to the atmosphere (or inlet to a control device, if any) of a metal HAP-containing gas stream from any CMPU at an affected source.

*Organic HAP* means any organic HAP listed in section 112(b) of the CAA. For the purposes of requirements in this subpart VVVVVV, hydrazine is to be considered an organic HAP.

*Process vessel* means each vessel, except hand-held containers, used in the processing of raw materials to chemical products. Examples include, but are not limited to reactors, distillation units, centrifuges, mixing vessels, and process tanks.

*Product* means a compound or chemical which is manufactured as the intended product of the CMPU. Products include co-products. By-products, isolated intermediates, impurities, wastes, and trace contaminants are not considered products.

*Reactive material* means energetics, organic peroxides, and unstable chemicals such as chemicals that react violently with water and chemicals that vigorously polymerize, decompose, or become self-reactive under conditions of pressure or temperature.

*Recovery device* means an individual unit of equipment capable of and normally used for the purpose of recovering organic chemicals or metal-containing chemicals for fuel value (i.e., net positive heating value), use, reuse, or for sale for fuel value, use, or reuse. Examples of equipment that may be recovery devices include absorbers, carbon adsorbers, condensers, oil-water separators or organic-water separators, or organic removal devices such as decanters, strippers, or thin-film evaporation units.

*Resinous material* means a viscous, high-boiling point material resembling pitch or tar, such as plastic resin, that sticks to or hardens in the fill pipe under normal transfer conditions.

*Shutdown*, for a unit operation with a continuous process vent, means the cessation of the unit operation for any purpose. Shutdown begins with the initiation of steps as described in a written standard operating procedures (SOP) or shutdown plan to cease normal/stable operation (e.g., reducing or immediately stopping feed).

*Startup*, for a unit operation with a continuous process vent, means the setting in operation of the unit for any purpose. The period of startup ends upon completion of the transient, non-equilibrium step at the time operating conditions reach steady state for operating parameters such as temperature, pressure, composition, feed rate, and production rate. Periods of startup described by SOP manuals at the affected source may be used to determine the period of startup.

*Storage tank* means a tank or other vessel that is used to store liquids that contain organic HAP and that are part of a CMPU subject to this subpart VVVVVV. The following are not considered storage tanks for the purposes of this subpart:

- (1) Vessels permanently attached to motor vehicles such as trucks, railcars, barges, or ships;
- (2) Pressure vessels designed to operate in excess of 204.9 kilopascals (kPa) and without emissions to the atmosphere;
- (3) Process tanks;
- (4) Tanks storing organic liquids containing HAP only as impurities;
- (5) Surge control vessels;
- (6) Bottoms receivers; and
- (7) Wastewater storage tanks.

*Transfer operations* means all product loading into tank trucks and rail cars of liquid containing organic HAP from a transfer rack. Transfer operations do not include the loading to other types of containers such as cans, drums, and totes.

*Transfer rack* means the system used to load organic liquids into tank trucks and railcars at a single geographic site. It includes all loading arms, pumps, meters, shutoff valves, relief valves, and other piping and equipment necessary for the transfer operation. Transfer equipment that are physically separate (i.e., do not share common piping, valves, and other equipment) are considered to be separate transfer racks.

*Wastewater* means water that is discarded from a CMPU or control device and that contains at least 5 ppmw of any HAP listed in Table 9 to 40 CFR part 63, subpart G and has an annual average flow rate of 0.02 liters per minute. Wastewater means both process wastewater and maintenance wastewater that is discarded from a CMPU or control device. The following are not considered wastewater for the purposes of this subpart:

- (1) Stormwater from segregated sewers;
- (2) Water from fire-fighting and deluge systems, including testing of such systems;
- (3) Spills;
- (4) Water from safety showers;
- (5) Samples of a size not greater than reasonably necessary for the method of analysis that is used;
- (6) Equipment leaks;
- (7) Wastewater drips from procedures such as disconnecting hoses after cleaning lines; and
- (8) Noncontact cooling water.

*Wastewater stream* means a single point discharge of wastewater from a CMPU or control device.

*Wastewater treatment* means chemical, biological, and mechanical procedures applied to wastewater to remove or reduce HAP or other chemical constituents.

**§ 63.11503 Who implements and enforces this subpart?**

(a) This subpart can be implemented and enforced by the U.S. EPA or a delegated authority such as a State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or tribal agency pursuant to 40 CFR part 63, subpart E, then that Agency has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to a State, local, or tribal agency within your State.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the approval authorities contained in paragraphs (b)(1) through (4) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(1) Approval of an alternative non-opacity emissions standard under §63.6(g).

(2) Approval of a major change to a test method. A “major change to test method” is defined in §63.90.

(3) Approval of a major change to monitoring under §63.8(f). A “major change to monitoring” is defined in §63.90.

(4) Approval of a major change to recordkeeping/reporting under §63.10(f). A “major change to recordkeeping/reporting” is defined in §63.90.

**Table 1 to Subpart VVVVVV of Part 63—Hazardous Air Pollutants Used To Determine Applicability of Chemical Manufacturing Operations**

As required in §63.11494(a), chemical manufacturing operations that process, use, or produce the HAP shown in the following table are subject to subpart VVVVVV.

Type of HAP	Chemical name	CAS No.
1. Organic compounds	a. 1,3-butadiene	106990
	b. 1,3-dichloropropene	542756
	c. Acetaldehyde	75070
	d. Chloroform	67663
	e. Ethylene dichloride	107062
	f. Hexachlorobenzene	118741
	g. Methylene chloride	75092
	h. Quinoline	91225
2. Metal compounds	a. Arsenic compounds	
	b. Cadmium compounds	
	c. Chromium compounds	
	d. Lead compounds	
	e. Manganese compounds	
	f. Nickel compounds	
3. Others	a. Hydrazine	302012

**Table 2 to Subpart VVVVVV of Part 63—Emission Limits and Compliance Requirements for Batch Process Vents**

As required in §63.11496, you must comply with the requirements for batch process vents as shown in the following table.

For * * *	You must * * *	Except * * *
1. Batch process vents in a CMPU at an existing source for which the total organic HAP emissions are equal to or greater than 10,000 lb/yr	a. Reduce collective uncontrolled total organic HAP emissions from the sum of all batch process vents by $\geq 85$ percent by weight or to $\leq 20$ ppmv by routing emissions from a sufficient number of the batch process vents through a closed vent system to any combination of control devices (except a flare) in accordance with the requirements of §63.982(c) and the requirements referenced therein; or	i. Compliance may be based on either total organic HAP or total organic carbon (TOC); and ii. As specified in §63.11496(g).
	b. Route emissions from batch process vents containing at least 85 percent of the uncontrolled total organic HAP through a closed-vent system to a flare (except that a flare may not be used to control halogenated vent streams) in accordance with the requirements of §63.982(b) and the requirements referenced therein; or	i. Not applicable.
	c. Comply with the alternative standard specified in §63.2505 and the requirements referenced therein; or	i. As specified in §63.11496(e) of this subpart.
	d. Comply with combinations of the requirements in Items a., b., and c. of this Table for different groups of batch process vents	i. The information specified above for Items a., b., and c., as applicable.
2. Batch process vents in a CMPU at a new source for which the total organic HAP emissions are equal to or greater than 10,000 lb/yr	a. Comply with any of the emission limits in Items 1.a through 1.d of this Table, except 90 percent reduction applies instead of 85 percent reduction in Item 1.a, and 90 percent of the emissions must be routed to a flare instead of 85 percent in Item 1.b	i. The information specified above for Items 1.a., 1.b., 1.c., and 1.d, as applicable.
3. Halogenated batch process vent stream at a new or existing source that is controlled through combustion	a. Comply with the requirements for halogen scrubbers in §63.11496(d).	

**Table 3 to Subpart VVVVVV of Part 63—Emission Limits and Compliance Requirements for Continuous Process Vents**

As required in §63.11496, you must comply with the requirements for continuous process vents as shown in the following table.

For * * *	You must * * *	Except * * *
1. Each continuous process vent with a TRE ≤1.0	a. Reduce emissions of total organic HAP by ≥95 percent by weight (≥85 percent by weight for periods of startup or shutdown) or to ≤20 ppmv by routing emissions through a closed vent system to any combination of control devices (except a flare) in accordance with the requirements of §63.982(c)(2) and the requirements referenced therein; or	i. Compliance may be based on either total organic HAP or TOC; and ii. As specified in §63.11496(g).
	b. Reduce emissions of total organic by HAP by routing all emissions through a closed-vent system to a flare (except that a flare may not be used to control halogenated vent streams) in accordance with the requirements of §63.982(b) and the requirements referenced therein; or	i. Not applicable.
	c. Comply with the alternative standard specified in §63.2505 and the requirements referenced therein	i. As specified in §63.11496(e).
2. Halogenated vent stream that is controlled through combustion	a. Comply with the requirements for halogen scrubbers in §63.11496(d).	

**Table 4 to Subpart VVVVVV of Part 63—Emission Limits and Compliance Requirements for Metal HAP Process Vents**

As required in §63.11496(f), you must comply with the requirements for metal HAP process vents as shown in the following table.

For * * *	You must * * *	Except * * *
Each CMPU with total metal HAP emissions ≥400 lb/yr	Reduce collective uncontrolled emissions of total metal HAP emissions by ≥95 percent by weight by routing emissions from a sufficient number of the metal process vents through a closed-vent system to any combination of control devices, according to the requirements of §63.11496(f)(3), (4), or (5)	Not applicable.

**Table 5 to Subpart VVVVVV of Part 63—Emission Limits and Compliance Requirements for Storage Tanks**

As required in §63.11497, you must comply with the requirements for storage tanks as shown in the following table.

For each * * *	You must * * *	Except * * *
1. Storage tank with a design capacity ≥40,000 gallons, storing liquid that contains organic HAP listed in Table 1 to this subpart, and for which the maximum true vapor pressure (MTVP) of total organic HAP at the storage temperature is ≥5.2 kPa and <76.6 kPa	a. Comply with the requirements of subpart WW of this part;	i. All required seals must be installed by the compliance date in §63.11494.

For each * * *	You must * * *	Except * * *
	b. Reduce total organic HAP emissions by $\geq 95$ percent by weight by operating and maintaining a closed-vent system and control device (other than a flare) in accordance with §63.982(c)(1); or	i. Compliance may be based on either total organic HAP or TOC; ii. Comply with the management practice inspection requirements in §63.11495 for the closed-vent system; iii. When the term storage vessel is used in subpart SS of this part, the term storage tank, surge control vessel, or bottoms receiver, as defined in §63.11502 of this subpart, applies; and iv. The requirements do not apply during periods of planned routine maintenance of the control device, as specified in §63.11497(b).
	c. Reduce total HAP emissions by operating and maintaining a closed-vent system and a flare in accordance with §63.982(b); or	i. The requirements do not apply during periods of planned routine maintenance of the flare, as specified in §63.11497(b); and ii. When the term storage vessel is used in subpart SS of this part, it means storage tank, surge control vessel, or bottoms receiver, as defined in §63.11502 of this subpart.
	d. Vapor balance in accordance with §63.2470(e); or	i. Not applicable.
	e. Route emissions to a fuel gas system or process in accordance with the requirements in §63.982(d) and the requirements referenced therein	i. When the term storage vessel is used in subpart SS of this part, it means storage tank, surge control vessel, or bottoms receiver, as defined in §63.11502.
2. Storage tank with a design capacity $\geq 20,000$ gallons and $< 40,000$ gallons, storing liquid that contains organic HAP listed in Table 1 to this subpart, and for which the MTVP of total organic HAP at the storage temperature is $\geq 27.6$ kPa and $< 76.6$ kPa	a. Comply with one of the options in Item 1 of this table	i. The information specified above for Items 1.a., 1.b., 1.c., 1.d, and 1.e, as applicable.

For each * * *	You must * * *	Except * * *
3. Storage tank with a design capacity $\geq 20,000$ gallons, storing liquid that contains organic HAP listed in Table 1 to this subpart, and for which the MTVP of total organic HAP at the storage temperature is $\geq 76.6$ kPa	a. Comply with option b, c, d, or e in Item 1 of this table	i. The information specified above for Items 1.b., 1.c., 1.d, and 1.e, as applicable.
4. Storage tank described by Item 1, 2, or 3 in this table and emitting a halogenated vent stream that is controlled with a combustion device	a. Reduce emissions of hydrogen halide and halogen HAP by $\geq 95$ percent by weight, or to $\leq 0.45$ kg/hr, or to $\leq 20$ ppmv by using a halogen reduction device after the combustion device according to the requirements in §63.11496(d); or	
	b. Reduce the halogen atom mass emission rate to $\leq 0.45$ kg/hr or to $\leq 20$ ppmv by using a halogen reduction device before the combustion device according to the requirements in §63.11496(d).	

**Table 6 to Subpart VVVVVV of Part 63—Emission Limits and Compliance Requirements for Wastewater Systems**

As required in §63.11498, you must comply with the requirements for wastewater systems as shown in the following table.

For each * * *	You must * * *	And you must * * *
1. Wastewater stream	a. Discharge to onsite or offsite treatment	i. Maintain records identifying each wastewater stream and documenting the type of treatment that it receives. Multiple wastewater streams with similar characteristics and from the same type of activity in a CMPU may be grouped together for recordkeeping purposes.
2. Wastewater stream containing partially soluble HAP at a concentration $\geq 10,000$ ppmw and separate organic and water phases	a. Use a decanter, steam stripper, thin film evaporator, or distillation unit to separate the water phase from the organic phase(s); or	i. For the water phase, comply with the requirements in Item 1 of this table, and ii. For the organic phase(s), recycle to a process, use as fuel, or dispose as hazardous waste either onsite or offsite, and iii. Keep records of the wastewater streams subject to this requirement and the disposition of the organic phase(s).
	b. Hard pipe the entire wastewater stream to onsite treatment as a hazardous waste, or hard pipe the entire wastewater stream to a point of transfer for offsite treatment as a hazardous waste	i. Keep records of the wastewater streams subject to this requirement and the disposition of the wastewater streams.

**Table 7 to Subpart VVVVVV of Part 63—Partially Soluble HAP**

As required in §63.11498(a), you must comply with emission limits for wastewater streams that contain the partially soluble HAP listed in the following table.

Partially soluble HAP name	CAS No.
1. 1,1,1-Trichloroethane (methyl chloroform)	71556
2. 1,1,2,2-Tetrachloroethane	79345
3. 1,1,2-Trichloroethane	79005
4. 1,1-Dichloroethylene (vinylidene chloride)	75354
5. 1,2-Dibromoethane	106934
6. 1,2-Dichloroethane (ethylene dichloride)	107062
7. 1,2-Dichloropropane	78875
8. 1,3-Dichloropropene	542756
9. 2,4,5-Trichlorophenol	95954
10. 1,4-Dichlorobenzene	106467
11. 2-Nitropropane	79469
12. 4-Methyl-2-pentanone (MIBK)	108101
13. Acetaldehyde	75070
14. Acrolein	107028
15. Acrylonitrile	107131
16. Allyl chloride	107051
17. Benzene	71432
18. Benzyl chloride	100447
19. Biphenyl	92524
20. Bromoform (tribromomethane)	75252
21. Bromomethane	74839
22. Butadiene	106990
23. Carbon disulfide	75150
24. Chlorobenzene	108907
25. Chloroethane (ethyl chloride)	75003
26. Chloroform	67663
27. Chloromethane	74873
28. Chloroprene	126998
29. Cumene	98828
30. Dichloroethyl ether	111444

<b>Partially soluble HAP name</b>	<b>CAS No.</b>
31. Dinitrophenol	51285
32. Epichlorohydrin	106898
33. Ethyl acrylate	140885
34. Ethylbenzene	100414
35. Ethylene oxide	75218
36. Ethylidene dichloride	75343
37. Hexachlorobenzene	118741
38. Hexachlorobutadiene	87683
39. Hexachloroethane	67721
40. Methyl methacrylate	80626
41. Methyl-t-butyl ether	1634044
42. Methylene chloride	75092
43. N-hexane	110543
44. N,N-dimethylaniline	121697
45. Naphthalene	91203
46. Phosgene	75445
47. Propionaldehyde	123386
48. Propylene oxide	75569
49. Styrene	100425
50. Tetrachloroethylene (per- chloroethylene)	127184
51. Tetrachloromethane (carbon tetrachloride)	56235
52. Toluene	108883
53. Trichlorobenzene (1,2,4-)	120821
54. Trichloroethylene	79016
55. Trimethylpentane	540841
56. Vinyl acetate	108054
57. Vinyl chloride	75014
58. Xylene (m)	108383
59. Xylene (o)	95476
60. Xylene (p)	106423

**Table 8 to Subpart VVVVVV of Part 63—Emission Limits and Compliance Requirements for Heat Exchange Systems**

As required in §63.11499, you must comply with the requirements for heat exchange systems as shown in the following table.

For * * *	You must * * *	Except * * *
1. Each heat exchange system with a cooling water flow rate ≥8,000 gal/min and not meeting one or more of the conditions in §63.104(a)	a. Comply with the monitoring requirements in §63.104(c), the leak repair requirements in §63.104(d) and (e), and the recordkeeping and reporting requirements in §63.104(f); or	i. The reference to monthly monitoring for the first 6 months in §63.104(c)(1)(iii) does not apply. Monitoring shall be no less frequent than quarterly; ii. The reference in §63.104(f)(1) to record retention requirements in §63.103(c)(1) does not apply. Records must be retained as specified in §§63.10(b)(1) and 63.11501(c); and iii. The reference in §63.104(f)(2) to “the next semi-annual periodic report required by §63.152(c)” means the next semi-annual compliance report required by §63.11501(f).
	b. Comply with the heat exchange system requirements in §63.104(b) and the requirements referenced therein	i. Not applicable.

**Table 9 to Subpart VVVVVV of Part 63—Applicability of General Provisions to Subpart VVVVVV**

As required in §63.11501(a), you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) as shown in the following table.

Citation	Subject	Applies to Subpart VVVVVV?	Explanation
63.1(a)(1), (a)(2), (a)(3), (a)(4), (a)(6), (a)(10)–(a)(12) (b)(1), (b)(3), (c)(1), (c)(2), (c)(5), (e)	Applicability	Yes	
63.1(a)(5), (a)(7)–(a)(9), (b)(2), (c)(3), (c)(4), (d)	Reserved	No	
63.2	Definitions	Yes	
63.3	Units and Abbreviations	Yes	
63.4	Prohibited Activities and Circumvention	Yes	
63.5	Preconstruction Review and Notification Requirements	Yes	

Citation	Subject	Applies to Subpart VVVVVV?	Explanation
63.6(a), (b)(1)–(b)(5), (b)(7), (c)(1), (c)(2), (c)(5), (e)(1)(iii), (g), (i), (j)	Compliance with Standards and Maintenance Requirements	Yes	
63.6(b)(6), (c)(3), (c)(4), (d), (h)(3), (h)(5)(iv)	Reserved	No	
63.6 (e)(1)(i) and (ii), (e)(3), and (f)(1)	SSM Requirements	No	
63.6(h)(1)–(h)(4), (h)(5)(i)–(h)(5)(iii), (h)(6)–(h)(9)		No	Subpart VVVVVV does not include opacity or visible emissions (VE) standards or require a continuous opacity monitoring system (COMS).
63.7(a)(1), (a)(3), (a)(4), (c), (e)(4), and (f)–(h)	Performance Testing Requirements	Yes	
63.7(a)(2), (b), (d), (e)(1)–(3)	Performance Testing Schedule, Notification of Performance Test, Performance Testing Facilities, and Conduct of Performance Tests	Yes/No	Requirements apply if conducting test for metal HAP control; requirements in §§63.997(c)(1), (d), (e), and 63.999(a)(1) apply, as referenced in §63.11496(g), if conducting test for organic HAP or hydrogen halide and halogen HAP control device.
63.8(a)(1), (a)(4), (b), (c)(1)–(c)(3), (f)(1)–(5)	Monitoring Requirements	Yes	References to SSM in §63.8(c) do not apply.
63.8(a)(2)	Monitoring Requirements	No	
63.8(a)(3)	Reserved	No	
63.8(c)(4)		No	Continuous parameter monitoring system (CPMS) requirements in 40 CFR part 63, subparts SS and FFFF are referenced from §63.11496.
63.8(c)(5)		No	Subpart VVVVVV does not require COMS.
63.8(c)(6)–(c)(8), (d), (e), (f)(6)		Yes	Requirements apply only if you use a continuous emission monitoring system (CEMS) to demonstrate compliance with the alternative standard in §63.11496(e). References to SSM in §63.8(d) do not apply.

Citation	Subject	Applies to Subpart VVVVVV?	Explanation
63.8(g)(1)–(g)(4)		Yes	Data reduction requirements apply only if you use CEMS to demonstrate compliance with alternative standard in §63.11496(e). COMS requirements do not apply. Requirement in §63.8(g)(2) does not apply because data reduction for CEMS are specified in 40 CFR part 63, subpart FFFF.
63.8(g)(5)		No	Data reduction requirements for CEMS are specified in 40 CFR part 63, subpart FFFF, as referenced from §63.11496. CPMS requirements are specified in 40 CFR part 63, subparts SS and FFFF, as referenced from §63.11496.
63.9(a), (b)(1), (b)(2), (b)(4), (b)(5), (c), (d), (e), (i)	Notification Requirements	Yes	
63.9(b)(3), (h)(4)	Reserved	No	
63.9(f)		No	Subpart VVVVVV does not contain opacity or VE limits.
63.9(g)		Yes	Additional notification requirement applies only if you use CEMS to demonstrate compliance with alternative standard in §63.11496(e).
63.9(h)(1)–(h)(3), (h)(5)–(h)(6)		Yes	Except subpart VVVVVV does not contain opacity or VE limits.
63.9(j)	Change in Information Already Provided	No	Notification of process changes that affect a compliance determination are required in §63.11501(d)(4).
63.10(a)	Recordkeeping Requirements	Yes	
63.10(b)(1)		Yes	
63.10(b)(2)(i)–(b)(2)(v)		Yes	Any references to SSM do not apply.
63.10(b)(2)(vi), (x), (xi), (xiii)		Yes	Apply only if you use CEMS to demonstrate compliance with alternative standard in §63.11496(e).
63.10(b)(2)(vii)–(b)(2)(ix), (b)(2)(xii), (b)(2)(xiv)		Yes	
63.10(b)(3)		Yes	

Citation	Subject	Applies to Subpart VVVVVV?	Explanation
63.10(c)(1), (c)(5)–(c)(6), (c)(13)–(c)(14)		Yes	Apply only if you use CEMS to demonstrate compliance with alternative standard in §63.11496(e).
63.10(c)(7)–(c)(8),(c)(10)–(c)(12),(c)(15)		Yes	Any reference to SSM does not apply.
63.10(c)(2)–(c)(4), (c)(9)	Reserved	No	
63.10(d)(1), (d)(2), (d)(4), (e)(1), (e)(2), (f)	Reporting Requirements	Yes	
63.10(d)(3)		No	Subpart VVVVVV does not include opacity or VE limits.
63.10(d)(5)		No	
63.10(e)(1)–(e)(2)		Yes	Apply only if you use CEMS to demonstrate compliance with alternative standard in §63.11496(e).
63.10(e)(3)		Yes	
63.10(e)(4)		No	Subpart VVVVVV does not include opacity or VE limits.
63.11	Control Device Requirements	Yes	
63.12	State Authorities and Delegations	Yes	
63.13	Addresses	Yes	
63.14	Incorporations by Reference	Yes	
63.15	Availability of Information and Confidentiality	Yes	
63.16	Performance Track Provisions	Yes	

## Indiana Department of Environmental Management Office of Air Quality

### Addendum to the Technical Support Document (TSD) for a Part 70 Significant Permit Modification

#### Source Description and Location

Source Name:	Praxair, Inc.
Source Location:	2551 Dickey Road, East Chicago, Indiana 46312
County:	Lake
SIC Code:	2813
Operation Permit Renewal No.:	T 089-23333-00435
Operation Permit Renewal Issuance Date:	January 14, 2008
Significant Permit Modification No.:	089-28926-00435
Permit Reviewer:	Kimberly Cottrell

#### Public Notice Information

On March 30, 2010, the Office of Air Quality (OAQ) had notices published in the Gary Post Tribune in Merrillville, Indiana, and The Times in Munster, Indiana, stating that Praxair, Inc. had applied for a significant modification to their Part 70 Operating Permit Renewal issued on January 14, 2008, to revise the emission limit for Boiler 3. 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.

#### Permit Changes

Upon further review, the OAQ has decided to make the following revisions to the permit:

**Change No. 1:** B.10 Preventive Maintenance Plan: The last sentence of paragraphs (a) and (b) was omitted. The correct permit condition is as follows:

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

---

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

(1) - (3) ...

**The Permittee shall implement the PMPs.**

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

(1) - (3) ...

...

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 PMPs.**

(c) - (d) ...

**Change No. 2:** C.6 Performance Testing: The last sentence of paragraph (c) was included in the TSD, but was not included in the permit. The condition is correct in the permit. The following statement that was included in the TSD (Change No. 15, C.8 Performance Testing) is not needed: "*The extension request submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by the-a "responsible official" as defined by 326 IAC 2-7-1(34).*"

**Change No. 3:** C.17 General Reporting Requirements: The first sentence of condition (f) reads "*The report for project...*" An "a" should be inserted between "*for*" and "*project*" so it reads the same as the TSD. The phrase "*shall be submitted*" was not included in the TSD. The correct permit condition is as follows:

C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-3]

(a) - (e) ...

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

(1) - (3) ...

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

...

(g) ...

**Change No. 4:** D.1.3 Preventive Maintenance Plan: This condition reads "*A Preventive...*" in the TSD. The correct permit condition is as follows:

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan (PMP) is required for Reformer No. 1, 2, 3 & 4, and Boiler No. 3. Section B - Preventive Maintenance Plan contains the Permittee's obligations with regard to the preventive maintenance plan required by this condition.

**Change No. 5:** The following statement has been removed from the reporting forms:

*"Attach a signed certification that meets the requirements of 326 IAC 2-7-6(1) to complete this report."*

**Change No. 6:** TSD Change No. 6 refers to Condition B.15, but in the permit it is Condition B.2.

**Change No. 7:** TSD Change No. 12 refers to Condition B.19(a), but in the permit it is Condition B.18(a).

**Change No. 8:** TSD Change No. 15 refers to Condition C.8, but in the permit it is Condition C.6.

**Change No. 9:** TSD Change No. 16 refers to Condition C.10, but in the permit it is Condition C.8.

**Change No. 10:** TSD Change No. 28 refers to Condition D.1.8, but in the permit it is Condition D.1.7.

**Change No. 11:** TSD Change No. 29 refers to Condition D.1.9, but in the permit it is Condition D.1.8.

<b>Additional Permit Changes</b>
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Upon further review, the OAQ has decided to make the following additional revisions to the permit:

**Change No. 12:** IDEM, OAQ has decided to remove all references to the source mailing address. IDEM, OAQ will continue to maintain records of the mailing address. The changes to Condition A.1 and the source information on the reporting forms is as follows:

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

The Permittee owns and operates a stationary industrial gas manufacturing source.

Source Address: 2551 Dickey Road, East Chicago, Indiana 46312

Mailing Address: ~~P.O. Box 712, Whiting, IN 46394~~

...

## Certification, Emergency Occurrence Report, Quarterly Report, and Quarterly Deviation and Compliance Monitoring Report

Source Name: Praxair, Inc.

Source Address: 2551 Dickey Road, East Chicago, Indiana 4631

Mailing Address: ~~P.O. Box 712, Whiting, IN 46394~~

Part 70 Permit No.: T 089-23333-00435

**Change No. 13:** The U.S. EPA has acknowledged in both the proposed and final rulemaking for this redesignation that the anti-backsliding provisions for the 1-hour ozone standard no longer apply as a result of the redesignation under the 8-hour ozone standard. Therefore, permits in Lake County are no longer subject to review pursuant to Emission Offset, 326 IAC 2-3.

The source is located in Lake County.

<b>Table 1: County Attainment Status</b>	
Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Attainment effective February 18, 2000, for the part of the city of East Chicago bounded by Columbus Drive on the north; the Indiana Harbor Canal on the west; 148 <sup>th</sup> Street, if extended, on the south; and Euclid Avenue on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of East Chicago and Lake County.
O <sub>3</sub>	<del>Nonattainment Subpart 2 Moderate effective June 15, 2004, for the 8-hour ozone standard.<sup>†</sup></del>
O <sub>3</sub>	<b>Attainment effective June 4, 2010.<sup>1</sup></b>

Table 1: County Attainment Status	
Pollutant	Designation
PM <sub>10</sub>	Attainment effective March 11, 2003, for the cities of East Chicago, Hammond, Whiting, and Gary. Unclassifiable effective November 15, 1990, for the remainder of Lake County.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.
<sup>4</sup> Nonattainment Severe 17 effective November 15, 1990, for the Chicago-Gary-Lake County area for the 1-hour ozone standard which was revoked effective June 15, 2005. <sup>1</sup> The U. S. EPA has acknowledged in both the proposed and final rulemaking for this redesignation that the anti-backsliding provisions for the 1-hour ozone standard no longer apply as a result of the redesignation under the 8-hour ozone standard. Therefore, permits in Lake County are no longer subject to review pursuant to Emission Offset, 326 IAC 2-3. Basic nonattainment designation effective federally April 5, 2005, for PM <sub>2.5</sub> .	

- (a) ~~Volatile organic compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone.~~
- (1) ~~On December 22, 2006 the United States Court of Appeals, District of Columbia issued a decision that served to partially vacate and remand the U.S. EPA's final rule for implementation of the eight-hour National Ambient Air quality Standard for ozone. *South Coast Air Quality Mgmt. Dist. v. EPA*, 472 F.3d 882 (D.C. Cir., December 22, 2006), *rehearing denied* 2007 U.S. App. LEXIS 13748 (D.C. Cir., June 8, 2007). The U.S. EPA has instructed IDEM to issue permits in accordance with its interpretation of the *South Coast* decision as follows: Gary-Lake-Porter County was previously designated as a severe non-attainment area prior to revocation of the one-hour ozone standard, therefore, pursuant to the anti-backsliding provisions of the Clean Air Act, any new or existing source must be subject to the major source applicability cut-offs and offset ratios under the area's previous one-hour standard designation. This means that a source must achieve the Lowest Achievable Emission Rate (LAER) if it exceeds 25 tons per year of VOC emissions and must offset any increase in VOC emissions by a decrease of 1.3 times that amount.~~
- ~~On January 26, 1996 in 40 CFR 52.777(i), the U.S. EPA granted a waiver of the requirements of Section 182(f) of the CAA for Lake and Porter Counties, including the lower NO<sub>x</sub> threshold for nonattainment new source review. Therefore, VOC emissions alone are considered when evaluating the rule applicability relating to the 1-hour ozone standards. Therefore, VOC emissions were reviewed pursuant to the requirements for nonattainment new source review. See the State Rule Applicability for the source section.~~
- (2) ~~VOC and NOX emissions are considered when evaluating the rule applicability relating to the 8-hour ozone standard. Lake County has been designated as nonattainment for the 8 hour ozone standard. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability—Entire Source section.~~
- (a) **Ozone Standards**  
**Volatile organic compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>) 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<sub>x</sub> emissions are considered when evaluating the rule applicability relating to ozone.**

**Lake County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-3.**

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

The Permittee owns and operates a stationary industrial gas manufacturing plant.

...

County Location:	Lake
Source Location Status:	<del>Nonattainment for 8-hour ozone standard</del> Nonattainment for PM <sub>2.5</sub> standard Attainment for all other criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under <del>Emission Offset</del> <b>Nonattainment NSR</b> Rules Minor Source, Under PSD Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

...

**Change No. 14:** IDEM has revised Condition B.8, Certification, as follows:

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

(a) ...

(i) ...

(ii) ~~the certification is~~ **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) - (c) ...

<b>IDEM Contact</b>
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Questions regarding this proposed permit can be directed to:

Kimberly Cottrell  
Indiana Department Environmental Management  
Office of Air Quality  
100 North Senate Avenue  
MC 61-53, Room 1003  
Indianapolis, Indiana 46204-2251  
Toll free (within Indiana): 1-800-451-6027 extension 3-0870  
Or dial directly: (317) 233-0870  
kcottrel@idem.in.gov

Please refer to Significant Permit Modification No. 089-28926-00435 in all correspondence.

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

Technical Support Document (TSD)  
for a Part 70 Significant Permit Modification

**Source Description and Location**

Source Name:	Praxair, Inc.
Source Location:	2551 Dickey Road, East Chicago, Indiana 46312
County:	Lake
SIC Code:	2813
Operation Permit Renewal No.:	T 089-23333-00435
Operation Permit Renewal Issuance Date:	January 14, 2008
Significant Permit Modification No.:	089-28926-00435
Permit Reviewer:	Kimberly Cottrell

**Existing Approvals**

The source was issued Part 70 Operating Permit Renewal No. T 089-23333-00435 on January 14, 2008. The source has since received the following approvals:

Administrative Amendment No. 089-26392-00435, issued on April 14, 2008.

**County Attainment Status**

The source is located in Lake County.

**Table 1: County Attainment Status**

<b>Pollutant</b>	<b>Designation</b>
SO <sub>2</sub>	Better than national standards.
CO	Attainment effective February 18, 2000, for the part of the city of East Chicago bounded by Columbus Drive on the north; the Indiana Harbor Canal on the west; 148 <sup>th</sup> Street, if extended, on the south; and Euclid Avenue on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of East Chicago and Lake County.
O <sub>3</sub>	Nonattainment Subpart 2 Moderate effective June 15, 2004, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Attainment effective March 11, 2003, for the cities of East Chicago, Hammond, Whiting, and Gary. Unclassifiable effective November 15, 1990, for the remainder of Lake County.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.
<sup>1</sup> Nonattainment Severe 17 effective November 15, 1990, for the Chicago-Gary-Lake County area for the 1-hour ozone standard which was revoked effective June 15, 2005. Basic nonattainment designation effective federally April 5, 2005, for PM <sub>2.5</sub> .	

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone.
- (1) On December 22, 2006 the United States Court of Appeals, District of Columbia issued a decision that served to partially vacate and remand the U.S. EPA's final rule for implementation of the eight-hour National Ambient Air quality Standard for ozone. *South Coast Air Quality Mgmt. Dist. v. EPA*, 472 F.3d 882 (D.C. Cir., December 22, 2006), *rehearing denied* 2007 U.S. App. LEXIS 13748 (D.C. Cir., June 8, 2007). The U.S. EPA has instructed IDEM to issue permits in accordance with its interpretation of the *South Coast* decision as follows: Gary-Lake-Porter County was previously designated as a severe non-attainment area prior to revocation of the one-hour ozone standard, therefore, pursuant to the anti-backsliding provisions of the Clean Air Act, any new or existing source must be subject to the major source applicability cut-offs and offset ratios under the area's previous one-hour standard designation. This means that a source must achieve the Lowest Achievable Emission Rate (LAER) if it exceeds 25 tons per year of VOC emissions and must offset any increase in VOC emissions by a decrease of 1.3 times that amount.
- On January 26, 1996 in 40 CFR 52.777(i), the U.S. EPA granted a waiver of the requirements of Section 182(f) of the CAA for Lake and Porter Counties, including the lower NO<sub>x</sub> threshold for nonattainment new source review. Therefore, VOC emissions alone are considered when evaluating the rule applicability relating to the 1-hour ozone standards. Therefore, VOC emissions were reviewed pursuant to the requirements for nonattainment new source review. See the State Rule Applicability for the source section.
- (2) VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the 8-hour ozone standard. Lake County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability – Entire Source section.
- (b) PM<sub>2.5</sub>  
U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Lake County as nonattainment for PM<sub>2.5</sub>. On March 7, 2005 the Indiana Attorney General's Office, on behalf of IDEM, filed a law suit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's New Source Review Rule for PM<sub>2.5</sub> promulgated on May 8<sup>th</sup>, 2008, and effective on July 15<sup>th</sup> 2008. Therefore, direct PM<sub>2.5</sub> and SO<sub>2</sub> emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.
- (c) Lake County has been classified as attainment or unclassifiable for CO, NO<sub>2</sub>, PM<sub>10</sub>, SO<sub>2</sub>, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) Fugitive Emissions  
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

### Source Status

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

<b>Pollutant</b>	<b>Emissions (ton/yr)</b>
CO	246.10
NO <sub>x</sub>	189.58
PM	3.89
PM <sub>10</sub>	14.02
PM <sub>2.5</sub>	14.02
SO <sub>2</sub>	1.54
VOC	27.97
Single HAP	<10
Total HAP	<25

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (b) This existing source is a major stationary source, under Emission Offset (326 IAC 2-3), because NO<sub>x</sub> is emitted at a rate of 100 tons per year or more.
- (c) This existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).
- (d) These emissions are based upon the Part 70 Operating Permit Renewal No. T 089-23333-00435, issued on January 14, 2008.

### Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Praxair, Inc. on January 28, 2010, relating to revisions to the emission limit for Boiler 3 contained in Condition D.1.2.

### Enforcement Issues

There are no pending enforcement actions.

### Stack Summary

There are no new or modified stacks due to this modification.



Process / Emission Unit	Table 3: Potential to Emit (ton/yr)						
	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>
EO Major Source Threshold	NA	NA	100	100	100	NA	100

- (a) This existing stationary source is not major for PSD because the emissions of each criteria pollutant are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.
- (b) This existing stationary source is major for Emission Offset because the emissions of the nonattainment pollutant, NO<sub>x</sub>, are greater than one hundred (>100) tons per year.

**Federal Rule Applicability Determination**

Praxair is subject to the National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources (40 CFR Part 63, Subpart VVVVVV) with an initial compliance date of October 29, 2012. The emission units subject to this rule include the following:

- (a) One (1) steam methane Reformer No. 1, identified as A3 and installed in 1991, equipped with a low NO<sub>x</sub> burner, using a mixture of process tail gas and natural gas as fuel and rated at 45 million British thermal units (MMBtu) per hour, exhausting at one (1) stack identified as SV003. During Reformer No. 1 startup, carbon monoxide (CO) containing process gas will exhaust through one (1) process vent stack identified as S/V 006.
- (b) One (1) steam methane Reformer No. 2, identified as A8 and installed in 1998, equipped with a low NO<sub>x</sub> burner, using a mixture of process tail gas and natural gas as fuel and rated at 37.1 MMBtu per hour, exhausting at one (1) stack identified as S/V 008. During Reformer No. 2 startup, carbon monoxide (CO) containing process gas will exhaust through one (1) process vent stack identified as S/V 010.
- (c) One (1) steam methane Reformer No. 3, identified as A11 and installed in 1999, equipped with a low NO<sub>x</sub> burner using a mixture of process tail gas and natural gas as fuel and rated at 83.8 MMBtu per hour, exhausting at one (1) stack identified as S/V 011. During Reformer No. 3 startup, carbon monoxide (CO) containing process gas will exhaust through one (1) process vent stack identified as S/V 012;
- (d) One (1) steam methane Reformer No. 4, identified as A17, constructed in 2006, equipped with a low NO<sub>x</sub> burner, using a mixture of process tail gas and natural gas as fuel and rated at 213.9 MMBtu per hour, exhausting at one (1) stack identified as S/V 017. During Reformer No. 4 startup, carbon monoxide (CO) containing process gas will exhaust through one (1) process vent stack identified as S/V 016.

These emission units are subject to the following portions of 40 CFR Part 63, Subpart VVVVVV:

- (a) 40 CFR 63.11494
- (b) 40 CFR 63.11495(a)(1), (3), (4), and (5)
- (c) 40 CFR 63.11496(f)(2)
- (d) 40 CFR 63.11500
- (e) 40 CFR 63.11501(a), (b), (c), and (d)
- (f) 40 CFR 63.11502
- (g) 40 CFR 63.11503
- (h) Table 1 to Subpart VVVVVV of Part 63
- (i) Table 9 to Subpart VVVVVV of Part 63

The provisions of 40 CFR 61 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1, apply to the facility described in this section except when otherwise specified in Table 9 of 40 CFR Part 63, Subpart VVVVVV.

There are no other changes to Federal Rule Applicability as a result of this modification.

#### State Rule Applicability Determination

There are no changes to State Rule Applicability as a result of this modification.

#### Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

##### Compliance Determination Requirements

There are no changes to the Compliance Determination Requirements as a result of this modification.

##### Compliance Monitoring Requirements

There are no changes to the Compliance Monitoring Requirements as a result of this modification.

#### Proposed Changes

The changes listed below have been made to Part 70 Operating Permit Renewal No. T 089-23333-00435. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**:

**Change No. 1** Condition A.1 been revised as follows:

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

The Permittee owns and operates a stationary ~~stationary~~ industrial gas manufacturing source.

Source Address:	2551 Dickey Road, East Chicago, Indiana 46312
Mailing Address:	P.O. Box 712, Whiting, IN 46394
General Source Phone Number:	(219) 398 - 3777
SIC Code:	2813
County Location:	Lake
Source Location Status:	Nonattainment for 8-hour ozone standard Nonattainment for PM 2.5 standard Attainment for all other criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under Emission Offset Rules Minor Source, Under PSD Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

**Change No. 2** Condition A.2 and the Facility Description in Section D.1 have been revised as follows:

- (a) One (1) steam methane Reformer No. 1, identified as A3 and installed in 1991, equipped with a low NOx burner, using a mixture of process tail gas and natural gas as fuel and rated at 45 million British thermal units (MMBtu) per hour, exhausting at one (1) stack identified as SV003. During Reformer No. 1 startup, carbon monoxide (CO) containing process gas will exhaust through one (1) process vent stack identified as S/V 006.

**Reformer No. 1 is subject to the National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources in 40 CFR 63, Subpart VVVVVV.**

- (b) One (1) steam methane Reformer No. 2, identified as A8 and installed in 1998, equipped with a low NOx burner, using a mixture of process tail gas and natural gas as fuel and rated at 37.1 MMBtu per hour, exhausting at one (1) stack identified as S/V 008. During Reformer No. 2 startup, carbon monoxide (CO) containing process gas will exhaust through one (1) process vent stack identified as S/V 010.

**Reformer No. 2 is subject to the National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources in 40 CFR 63, Subpart VVVVVV.**

- (c) One (1) steam methane Reformer No. 3, identified as A11 and installed in 1999, equipped with a low NOx burner using a mixture of process tail gas and natural gas as fuel and rated at 83.8 MMBtu per hour, exhausting at one (1) stack identified as S/V 011. During Reformer No. 3 startup, carbon monoxide (CO) containing process gas will exhaust through one (1) process vent stack identified as S/V 012.

**Reformer No. 3 is subject to the National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources in 40 CFR 63, Subpart VVVVVV.**

- (d) ...

- (e) One (1) natural gas fired Boiler No. 3, identified as A7 and installed in 1998, rated at 38.8 MMBtu per hour, equipped with a low-NOx burner, and exhausting at one (1) stack identified as S/V 007.

**Boiler No. 3 is subject to the Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units in 40 CFR 60, Subpart Dc.**

- (f) One (1) steam methane Reformer No. 4, identified as A17, constructed in 2006, equipped with a low NOx burner, using a mixture of process tail gas and natural gas as fuel and rated at 213.9 MMBtu per hour, exhausting at one (1) stack identified as S/V 017. During Reformer No. 4 startup, carbon monoxide (CO) containing process gas will exhaust through one (1) process vent stack identified as S/V 016.

**Reformer No. 4 is subject to the National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources in 40 CFR 63, Subpart VVVVVV.**

- Change No. 3** Several of IDEM's Branches and sections have been renamed. Therefore, IDEM has updated the addresses and contact information listed in the permit. References to "Permit Administration and Development Section" and the "Permits Branch" have been changed to "Permit Administration and Support Section". References to "Asbestos Section", "Compliance Data Section", "Air Compliance Section", "Compliance Section", and "Compliance Branch" have been changed to "Compliance and Enforcement Branch".

Indiana Department of Environmental Management  
**Permit Administration and Support Section**, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
**MC 61-53, IGCN 1003**  
Indianapolis, Indiana ~~46206-6015~~ **46204-2251**

Indiana Department of Environmental Management  
**Compliance and Enforcement Branch**, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
**MC 61-53, IGCN 1003**  
Indianapolis, Indiana ~~46206-6015~~ **46204-2251**

- Change No. 4** All references to the IDEM, OAQ, Compliance and Enforcement Branch telephone number and facsimile number have been revised as follows:

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, ~~Compliance Section~~  
**Compliance and Enforcement Branch**), or  
Telephone Number: 317-233-0178 (ask for ~~Compliance Section~~ **Compliance and Enforcement Branch**)

- Change No. 5** IDEM has made the following changes throughout the permit:

... require ~~the a~~ certification **that meets the requirements of 326 IAC 2-7-6(1)**...

...by ~~the a~~ "responsible official"...

- Change No. 6** IDEM has added clarification to Condition B.15, Permit Term, as follows:

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) The Part 70 Operating Permit Renewal, T 089-23333-00435, is issued for a fixed term of five (5) years ~~from the issuance date of this permit~~, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) ...

**Change No. 7** There may be times when it is unnecessary for a responsible official to "certify" additional information requested by IDEM; therefore, paragraph (a) of Condition B.7, Duty to Provide Information, is revised as follows:

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

---

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

(b) ...

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

---

(a) ~~Where specifically designated by this permit, any application form, report, or compliance certification submitted shall contain certification by a "responsible official" of truth, accuracy, and completeness. This certification shall state that, A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:~~

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

(ii) **the certification is based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.**

(b) ~~One (1) certification shall be included, using~~ **The Permittee may use** the attached Certification Form ~~or another form meeting the requirements of 326 IAC 2-7-4(f), 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).

**Change No. 8** The Preventive Maintenance Plan requirements have been clarified as follows:

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

---

~~(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:~~

(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.

~~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)~~

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

- (1) **Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;**
- (2) **A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and**
- (3) **Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.**

**If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the time frame specified in Section D, 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).**

- ~~(b)~~ (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require ~~the a~~ **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the a~~ "responsible official" as defined by 326 IAC 2-7-1(34).

- ~~(c)~~ (d) ...

**Change No. 9** The emergency provisions requirements have been clarified as follows:

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

---

(a) (b) ...

(1) - (3) ...

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, ~~within~~ **no later than** four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

...

(5) ...

~~within~~ **no later than** 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) - (C)...

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

(6) ...

(c) - (g) ...

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

**Change No. 10** IDEM has removed the Condition B.15, Deviations from Permit Requirements and Conditions, and moved the requirements to Condition C.18 (now C.17), General Reporting Requirements, (*See also Change No. 22*) as follows:

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

---

~~(a) Deviations from any permit requirements for any deviation for which a report is specifically required under Section D (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:~~

Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53, IGCN 1003  
Indianapolis, Indiana 46204-2254

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

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

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

**Change No. 11** The Permit Renewal requirements have been clarified as follows:

**B.17B.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 ~~the a~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the a~~ "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) ...
- (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 **reasonable** 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.

**Change No. 12** The words "or notice" have been added to Condition B.19(a) as follows:

~~B.19~~ **B.18** Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]  
[326 IAC 2-7-12(b)(2)]

---

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

**Change No. 13** The Opacity requirements have been clarified as follows:

**C.1** 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) - (b) ...

**Change No. 14** The Incineration requirements have been clarified as follows:

C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

---

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

**Change No. 15** The Performance Testing requirements have been clarified as follows:

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

---

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

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

**Change No. 16** The Compliance Monitoring requirements in Condition C.10 have been clarified as follows:

C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

---

~~Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:~~

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

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

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

The notification which shall be submitted by the Permittee does require ~~the a~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the 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.

**Change No. 17** The general requirements for Monitoring Methods were removed from Section C as follows (This provision will be included as needed in Section D of the permit.):

~~C.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]~~

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

**Change No. 18** IDEM has decided not to list the submission date of the ERP because the ERP can be updated without permit change. Paragraph (a) of original Condition C.12 (now C.11), Emergency Reduction Plans, is revised as follows:

~~C.12~~ **C.11** Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

- (a) The Permittee ~~prepared and~~ **shall maintain the most recently** submitted written emergency reduction plans (ERPs) consistent with safe operating procedures ~~on September 05, 2000.~~
- (b) ...

**Change No. 19** IDEM is revising Condition C.14 (now C.13) as follows:

~~C.14~~ **C.13** Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

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

- (a) ~~Upon detecting an excursion or exceedance, the~~ **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 taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions).~~ **Corrective actions** ~~The response~~ may include, but ~~are~~ **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 ~~within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable~~ **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 **necessarily** limited to, the following:
- (1) - (3) ...
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall ~~maintain the following records:~~ **record the reasonable response steps taken.**
- (1) ~~monitoring data;~~
  - (2) ~~monitor performance data, if applicable; and~~
  - (3) ~~corrective actions taken.~~

**Change No. 20** IDEM is revising paragraph (b) of Condition C.15 (now C.14) as follows:

~~C.15~~ **C.14** Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]

- 
- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the ~~Permittee shall take appropriate response actions.~~ The Permittee shall submit a description of ~~these~~ **its** response actions to IDEM, OAQ, no later than ~~thirty (30)~~ **seventy-five (75)** days after receipt ~~the date~~ of the test results. ~~The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.~~

(b) A retest to demonstrate compliance shall be performed ~~within~~ **no later than** one hundred ~~twenty (120)~~ **eighty (180)** days of receipt **after the date** of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred ~~twenty (120)~~ **eighty (180)** days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) ...

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

**Change No. 21** IDEM is revising paragraph (a) of Condition C.16 (now C.15) as follows:

~~C.16~~ **C.15** Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]  
[326 IAC 2-6]

---

- (a) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), the Permittee shall submit **by no later than July 1** an emission statement covering the previous calendar year as follows:
- (1) starting in 2004 and every three (3) years thereafter, and
  - (2) any year not already required under (1) if the source emits volatile organic compounds or oxides of nitrogen into the ambient air at levels equal to or greater than twenty-five (25) tons during the previous calendar year.
- (b) The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
  - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

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

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

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

**Change No. 22** The General Record Keeping requirements in Condition C.17 (now C.16) have been revised as follows:

~~C.17~~ **C.16** General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2] [326 IAC 2-3]

---

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

**Change No. 23** The General Reporting Requirements in Condition C.18 (now C.17) have been clarified as follows:

~~C.18~~ **C.17** General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [326 IAC 2-3]

---

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported **except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.** This report shall be submitted ~~within~~ **not later than** thirty (30) days ~~of~~ **after** the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include ~~the~~ **a certification that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a "responsible official"** as defined by 326 IAC 2-7-1(34). **A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.**
- (b) ~~Reports required by conditions in Section D of this permit shall be submitted to~~ **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) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted no later than thirty (30) days after the end of the reporting period. Unless otherwise specified in this permit, all reports required in Section D do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

- ~~(e)~~(d) **The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.** Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (f) (e) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:
- (1) - (2) ...
- ~~(g)~~ (f) The report for a project at an existing emissions unit ~~with~~ **no later than sixty (60) days** after the end of the year and contain the following:
- (1) - (3) ...
- (4) Any other information that the Permittee ~~deems fit~~ **wishes** to include in this report **such as an explanation as to why the emissions differ from the preconstruction project.**
- ...
- ~~(h)~~ (g) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C - General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

**Change No. 24** The Stratospheric Ozone Protection requirements in Condition C.19 (now C.18) have been revised as follows:

**C.19-C.18** Compliance with 40 CFR 82 and 326 IAC 22-1

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

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

**Change No. 25** The emission limits in Condition D.1.2 have been revised as follows:

**D.1.2** PSD Minor Limit [326 IAC 2-2]

---

Pursuant to SSM 089-20918-00435, issued on July 15, 2005:

- (a) ~~The total carbon monoxide (CO) production rate from process vent stacks of Reformer Nos. 1, 2, 3, and 4 (S/V 006, 010, 012, and 016, respectively) shall be less than 5,057.3 thousand standard cubic feet per twelve (12) consecutive month period with compliance determined at the end of each month; and the CO density shall not exceed 72 pounds per thousand cubic foot of gas produced at standard conditions (i.e., 1 atmosphere of pressure and 70 degrees Fahrenheit temperature).~~
- (b) ~~CO concentrations of 34.1% and 26.3% by weight for Reformers 2 and 3, respectively, or values established through performance testing for each process vent exhausting at, stacks S/V 010 and 012 during startup of Reformers 2 and 3, respectively.~~
- (c) ~~CO concentrations of 18.3% and 28.8% by weight for Reformers 1 and 4, respectively, at maximum CO<sub>2</sub> removal, or values established through performance testing at other CO<sub>2</sub> removal levels for each process vent exhausting at, stacks S/V 006 and 016 during startup of Reformers 1 and 4, respectively.~~
- (d) ~~The usage of natural gas in Boiler No. 3 shall be limited to 147.5 million cubic feet per twelve (12) consecutive month period, with compliance determined at the end of each month and the CO emissions shall not exceed 84.0 lb/MMScf.~~

The total carbon monoxide (CO) emissions from the process vent stacks of Reformer No. 1, 2, 3, and 4 and Boiler No. 3 shall be less than 191.1 tons per twelve (12) consecutive month period with compliance determined at the end of each month; and the CO emissions shall be calculated by the following equation:

$$CO = \frac{72.0 \text{ lb/TCF} \times (A + B + C + D) + 84.0 \text{ lb/MMCF} \times E}{2000 \text{ lb/ton}}$$

Where:

CO = Total CO emissions, tons/month

A = CO Vent Flow of Reformer No. 1 (S/V 006), TCF/month

B = CO Vent Flow of Reformer No. 2 (S/V 010), TCF/month

C = CO Vent Flow of Reformer No. 3 (S/V 012), TCF/month

D = CO Vent Flow of Reformer No. 4 (S/V 016), TCF/month

E = Natural gas consumption of Boiler No. 3, MMCF/month

TCF = Thousand cubic feet; CO emission factor for reformers is 72 lb/TCF at standard temperature and pressure (1 atm, 70°F)

MMCF = Million cubic feet; CO emission factor for boilers is 84 lb/MMCF

Compliance with the above limits, combined with potential to emit CO from other emissions units at this source shall limit the CO emissions from the entire source to less than 250 tons per twelve (12) consecutive month period and will render 326 IAC 2-2 not applicable.

**Change No. 26** The Preventive Maintenance Plan requirements in Condition D.1.3 have been revised as follows:

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

~~A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for Reformer Nos. 1, 2, 3 & 4, and Boiler No. 3.~~ **A Preventive Maintenance Plan (PMP) is required for Reformer No. 1, 2, 3 & 4, and Boiler No. 3. Section B - Preventive Maintenance Plan contains the Permittee's obligations with regard to the preventive maintenance plan required by this condition.**

**Change No. 27** The Testing Requirements in Condition D.1.5 have been revised as follows:

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

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- ~~(a)~~ In order to determine compliance with Condition D.1.2, the Permittee shall perform emissions testing to determine the CO concentration **emissions** for Reformer Nos. 1, 2, 3 and 4 ~~Process vents-process vent stacks~~ before June 2012, utilizing the methods as approved by the Commissioner. ~~Reformers~~ **Reformer No. 1 and 4** shall be tested at tail gas CO<sub>2</sub> removal levels that correspond to intended operation. These tests shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with **the provisions of 326 IAC 3-6 (Source Sampling Procedures)**. Section C - Performance Testing **contains the Permittee's obligations with regard to the performance testing required by this condition.**
- ~~(b)~~ The Permittee shall perform CO concentration and NO<sub>x</sub> emissions testing on Reformer No. 4 before June 2012, utilizing methods as approved by the commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

**Change No. 28** The Record Keeping Requirements in Conditions D.1.8 and D.2.4 have been revised as follows:

~~D.1.8~~ **D.1.7 Record Keeping Requirements**

---

- (a) ...
- (1) The continuous records for Reformer Nos. 1, 2, 3, and 4 as follows:
- (A) ...
- (B) ~~carbon monoxide production~~ **CO Vent Flow** at Reformer Nos. 1, 2, 3, and 4 process vent stacks (S/V006, 010, 012, and 016, respectively) and the continuously computed amount of carbon monoxide emitted.
- ~~(2)~~ The continuous records for Reformer Nos. 1, 2, 3, and 4 as follows:
- (A) ~~feedstock flow rate (standard cubic feet per hour); and~~
- (B) ~~continuously computed fuel (as natural gas plus tail gas) consumption rate and facility ratios of natural gas plus tail gas to feedstock flow rate used to demonstrate compliance during the most recent compliance stack test.~~
- (2) Monthly records of the natural gas consumption for Boiler No. 3.**
- (3) ...
- (b) ~~All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.~~ **contains the Permittee's obligations with regard to the record keeping required by this condition.**

**D.2.4 Record Keeping and Reporting Requirements**

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- ...
- (a) ...

(b) ...

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

**Change No. 29** The Reporting Requirements in Condition D.1.9 have been revised as follows:

**D.1.9 Reporting Requirements**

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The Permittee shall submit the following:

(a) ~~— A quarterly summary of the information to document compliance with Condition D.1.2.~~

~~The reports shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the period being reported. The report submitted by the Permittee does require the a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

**A quarterly summary of the information to document the compliance status with Condition D.1.2 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days following the end of each calendar quarter. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). Section C - General Reporting Requirements contains the Permittee's obligations with regard to the reporting required by this condition.**

**~~Part 70 Quarterly Report~~**

~~Facility: \_\_\_\_\_ Reformer Nos. 1, 2, 3, and 4 process vent stacks (S/V 006, 010, 012, and 016, respectively)  
Parameter: \_\_\_\_\_ Carbon Monoxide (CO)  
Limit: \_\_\_\_\_ Total CO production rate shall be less than 5.1361 million standard cubic feet per twelve (12) consecutive month period, based on:~~

**~~Part 70 Quarterly Report~~**

~~Facility: \_\_\_\_\_ Boiler No. 3  
Parameter: \_\_\_\_\_ Natural Gas Burned  
Limit: \_\_\_\_\_ 147.5 Million Cubic Feet of natural gas per twelve (12) consecutive month period, with compliance determined at the end of each month, equivalent to CO emissions of 6.2 tons per year.~~

**Part 70 Quarterly Report**

**Facility: \_\_\_\_\_ Reformers No. 1, 2, 3, and 4 and Boiler No. 3  
Parameter: \_\_\_\_\_ CO Emissions  
Limit: \_\_\_\_\_ 191.1 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.**

**Change No. 30** IDEM has revised the way that NSPS requirements are incorporated into the permit. Conditions D.1.9 and D.1.10 have been added to list the applicable portions of the NSPS and Condition D.1.7 has been removed. The full text of the NSPS requirements is included as an attachment to the permit. The revisions are as follows:

~~D.1.7 New Source Performance Standard (NSPS) Record Keeping Requirements [40 CFR 60, Subpart De]~~

~~Pursuant to 40 CFR 60.48c(g), the Permittee shall record and maintain records of the amounts of natural gas combusted in the Boiler No. 3 during each calendar month.~~

**New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]**

**D.1.9 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A]**

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to Boiler No. 3 except when otherwise specified in 40 CFR Part 60, Subpart Dc

**D.1.10 Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units) [326 IAC 12-1] [40 CFR Part 60, Subpart Dc]**

Boiler No. 3 shall comply with the following provisions of 40 CFR Part 60, Subpart Dc (included as Attachment A of this permit):

- (a) 40 CFR 60.40c(a)
- (b) 40 CFR 60.41c
- (c) 40 CFR 60.48c(g)

**Change No. 31** The requirements for National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources (40 CFR Part 63, Subpart VVVVVV) apply to Reformer No. 1, 2, 3 and 4 with an initial compliance date of October 29, 2012. IDEM has added these requirements as Conditions D.1.11 and D.1.12. The full text of the NESHAP requirements is included as an attachment to the permit. The revisions are as follows:

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

**D.1.11 General Provisions Relating to NESHAP [326 IAC 20-1] [40 CFR Part 63, Subpart VVVVVV]**

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to Reformer No. 1, 2, 3 and 4 except when otherwise specified in Table 9 of 40 CFR Part 63, Subpart VVVVVV.

**D.1.12 National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources [40 CFR Part 63, Subpart VVVVVV]**

Reformer No. 1, 2, 3 and 4 shall comply with the following provisions of 40 CFR Part 63, Subpart VVVVVV (included as Attachment B of this permit) with an initial compliance date of October 29, 2012:

- (a) 40 CFR 63.11494
- (b) 40 CFR 63.11495(a)(1), (3), (4), and (5)
- (c) 40 CFR 63.11496(f)(2)
- (d) 40 CFR 63.11500
- (e) 40 CFR 63.11501(a), (b), (c), and (d)
- (f) 40 CFR 63.11502
- (g) 40 CFR 63.11503
- (h) Table 1 to Subpart VVVVVV of Part 63
- (i) Table 9 to Subpart VVVVVV of Part 63

**Change No. 32** The Emergency Occurrence Report has been updated as follows:

### EMERGENCY OCCURRENCE REPORT

...

<input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12). <ul style="list-style-type: none"><li>• The Permittee must notify the Office of Air Quality (OAQ), <del>within</del> <b>no later than four (4) daytime</b> business hours (1-800-451-6027 or 317-233-0178, ask for Compliance and Enforcement Branch); and</li><li>• The Permittee must submit notice in writing or by facsimile <del>within</del> <b>no later than two (2) days</b> (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.</li></ul>
--

...

~~Attach a signed certification to complete this report.~~  
**A certification is not required for this report.**

**Change No. 33** The Quarterly Report has been updated as follows:

### Part 70 Quarterly Report

...

Attach a signed certification **that meets the requirements of 326 IAC 2-7-6(1)** to complete this report.

**Change No. 34** The Quarterly Deviation and Compliance Monitoring Report has been updated as follows:

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

...

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements <b>of this permit</b> , the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".
---

...

Attach a signed certification **that meets the requirements of 326 IAC 2-7-6(1)** to complete this report.

### **Conclusion and Recommendation**

The operation of this modified permit shall be subject to the conditions of the attached proposed Part 70 Significant Permit Modification No. 089-28926-00435. The staff recommend to the Commissioner that this Part 70 Significant Permit Modification be approved.

### **IDEM Contact**

Questions regarding this proposed permit can be directed to:

Kimberly Cottrell  
Indiana Department Environmental Management  
Office of Air Quality  
100 North Senate Avenue  
MC 61-53, Room 1003  
Indianapolis, Indiana 46204-2251  
Toll free (within Indiana): 1-800-451-6027 extension 3-0870  
Or dial directly: (317) 233-0870  
kcottrel@idem.in.gov

Please refer to Significant Permit Modification No. 089-28926-00435 in all correspondence.



# 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](http://www.idem.IN.gov)

## SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

**TO:** Ed Jurasevich  
Praxair, Inc.  
2551 Dickey Rd  
East Chicago, IN 46312

**DATE:** June 7, 2010

**FROM:** Matt Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

**SUBJECT:** Final Decision  
Part 70  
089-28926-00435

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:  
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](mailto:jbrush@idem.IN.gov).

Final Applicant Cover letter.dot 11/30/07



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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

June 7, 2010

TO: East Chicago Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

**Applicant Name: Praxair, Inc.**  
**Permit Number: 089-28926-00435**

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



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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**Commissioner**

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

TO: Interested Parties / Applicant

DATE: June 7, 2010

RE: Praxair, Inc. / 089-28926-00435

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

In order to conserve paper and reduce postage costs, IDEM's Office of Air Quality is now sending many permit decisions on CDs in Adobe PDF format. The enclosed CD contains information regarding the company named above.

This permit is also available on the IDEM website at:  
<http://www.in.gov/ai/appfiles/idem-caats/>

If you would like to request a paper copy of the permit document, please contact IDEM's central file room at:

Indiana Government Center North, Room 1201  
100 North Senate Avenue, MC 50-07  
Indianapolis, IN 46204  
Phone: 1-800-451-6027 (ext. 4-0965)  
Fax (317) 232-8659

**Please Note:** *If you feel you have received this information in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at [PPEAR@IDEM.IN.GOV](mailto:PPEAR@IDEM.IN.GOV).*

Enclosures  
CD Memo.dot 11/14/08

# Mail Code 61-53

IDEM Staff	CDENNY 6/7/2010 Praxair, Inc. 089-28926-00435 (final)		Type of Mail:  <b>CERTIFICATE OF MAILING ONLY</b>	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		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Ed Jurasevich Praxair, Inc. 2551 Dickey Rd East Chicago IN 46312 (Source CAATS)										
2		Elizabeth Casciani VP Operations & Service Praxair, Inc. P.O. Box 712 Whiting IN 46394 (RO CAATS)										
3		East Chicago City Council 4525 Indianapolis Blvd East Chicago IN 46312 (Local Official)										
4		East Chicago Public Library 2401 E Columbus Dr East Chicago IN 46312-2998 (Library)										
5		Gary - Hobart Water Corp 650 Madison St, P.O. Box M486 Gary IN 46401-0486 (Affected Party)										
6		Lake County Health Department-Gary 1145 W. 5th Ave Gary IN 46402-1795 (Health Department)										
7		WJOB / WZVN Radio 6405 Olcott Ave Hammond IN 46320 (Affected Party)										
8		Laurence A. McHugh Barnes & Thornburg 100 North Michigan South Bend IN 46601-1632 (Affected Party)										
9		Shawn Sobocinski 3229 E. Atlanta Court Portage IN 46368 (Affected Party)										
10		Ms. Carolyn Marsh Lake Michigan Calumet Advisory Council 1804 Oliver St Whiting IN 46394-1725 (Affected Party)										
11		Mark Coleman 9 Locust Place Ogden Dunes IN 46368 (Affected Party)										
12		Mr. Chris Hernandez Pipefitters Association, Local Union 597 8762 Louisiana St., Suite G Merrillville IN 46410 (Affected Party)										
13		Craig Hogarth 7901 West Morris Street Indianapolis IN 46231 (Affected Party)										
14		Lake County Commissioners 2293 N. Main St, Building A 3rd Floor Crown Point IN 46307 (Local Official)										
15		Anthony Copeland 2006 E. 140th Street East Chicago IN 46312 (Affected Party)										

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <b>Domestic Mail Manual R900, S913, and S921</b> for limitations of coverage on inured and COD mail. See <b>International Mail Manual</b> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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# Mail Code 61-53

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Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
											Remarks
1		Barbara G. 506 Lilac Street East Chicago IN 46312 (Affected Party)									
2		Mr. Robert Garcia 3733 Parrish Avenue East Chicago IN 46312 (Affected Party)									
3		Mr. Dave Copeland Conestoga-Rovers & Associates 2371 Georgetown Urban Blvd. Depew NY 14043 (Consultant)									
4		Ms. Karen Kroczek 8212 Madison Ave Munster IN 46321-1627 (Affected Party)									
5		Calumet Township Trustee 31 E 5th Avenue Gary IN 46402 (Affected Party)									
6		Joseph Hero 11723 S Oakridge Drive St. John IN 46373 (Affected Party)									
7		Gary City Council 401 Broadway # 209 Gary IN 46402 (Local Official)									
8											
9											
10											
11											
12											
13											
14											
15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <b>Domestic Mail Manual R900, S913, and S921</b> for limitations of coverage on inured and COD mail. See <b>International Mail Manual</b> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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