



# 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: March 24, 2010

RE: U.S. Steel - East Chicago Tin Products / 089-28852-00300

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

## Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, 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 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures  
FNPER.dot12/03/07



# 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)

Mr. Jim Alexander  
Manager, Environmental Air Compliance  
U.S. Steel - East Chicago Tin Products  
One North Broadway, MS 70A  
Gary, IN 46402

March 24, 2010

Re: 089-28852-00300  
Significant Source Modification to  
Part 70 Renewal No.: T089-27328-00300

Dear Alexander:

U.S. Steel - East Chicago Tin Products was issued a Part 70 Operating Permit Renewal on October 22, 2009 for a stationary tin mill. A letter requesting changes to this permit was received on January 6, 2010. Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction at the source:

- One (1) natural gas-fired steam generation boiler (emission unit B-1), approved in 2010 for construction, with a maximum heat input capacity of 181.8 MMBtu/hr, using low NOx burners and flue gas recirculation, and exhausting through one (1) stack (SS-1).

The following construction conditions are applicable to the proposed project:

General Construction Conditions

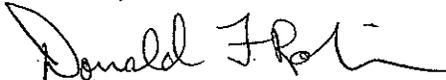
1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13 17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit  
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

This significant source modification authorizes construction of the new emission units. Operating conditions shall be incorporated into the Part 70 operating permit as a significant permit modification in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12. Operation is not approved until the significant permit modification has been issued.

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 Laura Spriggs, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251, or call at (800) 451-6027, and ask for Laura Spriggs or extension (3-5693), or dial (317) 233-5693.

Sincerely,



Donald F. Robin, P.E., Section Chief  
Permits Branch  
Office of Air Quality

Attachments:

Updated Permit  
Technical Support Document  
PTE Calculations

DFR/lss

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



# 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)

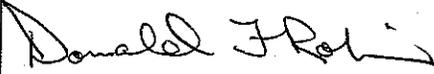
## Part 70 Significant Source Modification OFFICE OF AIR QUALITY

**U.S. Steel - East Chicago Tin Products  
101 East 129th Street  
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.

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.

This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-7-10.5, applicable to those conditions.

|  |                               |
|--|-------------------------------|
| Significant Source Modification No.: 089-28552-00300   |                               |
| Issued by:<br><br>Donald F. Robin, P.E., Section Chief<br>Permits Branch<br>Office of Air Quality | Issuance Date: March 24, 2010 |

## TABLE OF CONTENTS

### A. SOURCE SUMMARY

- A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]  
[326 IAC 2-7-5(15)]
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)]  
[326 IAC 2-7-5(15)]
- A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

### B. GENERAL CONDITIONS

- B.1 Definitions [326 IAC 2-7-1]
- 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)]
- B.3 Term of Conditions [326 IAC 2-1.1-9.5]
- B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]
- B.5 Severability [326 IAC 2-7-5(5)]
- B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]
- B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]
- B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]
- B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]
- 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]
- B.11 Emergency Provisions [326 IAC 2-7-16]
- B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]
- B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]
- B.14 Termination of Right to Operate [326 IAC 2-7-10][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]
- B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]
- B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]
- B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]  
[326 IAC 2-7-12(b)(2)]
- B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]
- B.20 Source Modification Requirement [326 IAC 2-7-10.5]
- 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]
- B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
- B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]
- B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

### C. SOURCE OPERATION CONDITIONS

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

- C.1 Opacity [326 IAC 5-1]
- C.2 Open Burning [326 IAC 4-1] [IC 13-17-9]
- C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
- C.4 Fugitive Dust Emissions [326 IAC 6-4]
- C.5 Stack Height [326 IAC 1-7]
- C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

- C.7 Performance Testing [326 IAC 3-6]

#### Compliance Requirements [326 IAC 2-1.1-11]

- C.8 Compliance Requirements [326 IAC 2-1.1-11]

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

- C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]
- C.10 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

**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]
- C.12 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]
- C.13 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]
- C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

**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]
- 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]
- 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]

**Stratospheric Ozone Protection**

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

**D.1 FACILITY OPERATION CONDITIONS - Continuous Pickling Line**

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

- D.1.1 Particulate [326 IAC 6.8-1-2]

**D.2 FACILITY OPERATION CONDITIONS – 6-Stand Cold Reduction Tandem Mill**

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

- D.2.1 Particulate [326 IAC 6.8-1-2]

**Compliance Determination Requirements**

- D.2.2 Oily Mist Control

**D.3 FACILITY OPERATION CONDITIONS – Continuous Annealing Line**

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

- D.3.1 Particulate [326 IAC 6.8-1-2]

**D.4 FACILITY OPERATION CONDITIONS - Tin Free Steel Line (Chrome Line)**

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

- D.4.1 Particulate [326 IAC 6.8-1-2]

**D.5 FACILITY OPERATION CONDITIONS – Electrolytic Tinning Line (Tin Line)**

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

- D.5.1 Particulate [326 IAC 6.8-1-2]

**D.6 FACILITY OPERATION CONDITIONS – Batch Annealing Operation**

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

- D.6.1 Particulate [326 IAC 6.8-1-2]

## **D.7 FACILITY OPERATION CONDITIONS – Steam Generation**

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

- D.7.1 Particulate Emissions [326 IAC 6.8-1-2]
- D.7.2 NOx PSD and Emission Offset Minor Limit [326 IAC 2-2] [326 IAC 2-3]
- D.7.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

### **Compliance Determination Requirements**

- D.7.4 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 3-5] [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)(A)(iii)]

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

- D.7.5 Record Keeping Requirements
- D.7.6 Reporting Requirements

## **D.8 FACILITY OPERATION CONDITIONS - Insignificant Activities**

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

- D.8.1 Particulate [326 IAC 6.8-1-2]
- D.8.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]
- D.8.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-8]

## **E.1 National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)][326 IAC 20-29][40 CFR 63, Subpart CCC]**

- E.1.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]
- E.1.2 National Emission Standards for Hazardous Air Pollutants for Steel Pickling-HCl Process Facilities and Hydrochloric Acid Regeneration Plants [326 IAC 20-29] [40 CFR 63, Subpart CCC]

## **E.2 New Source Performance Standards for Industrial-Commercial-Institutional Steam Generating Units Requirements [326 IAC 2-7-5(1)][326 IAC 12][40 CFR 60, Subpart Db]**

- E.2.1 General Provisions Relating to NSPS Db [326 IAC 12-1] [40 CFR 60, Subpart A]
- E.2.2 Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units [40 CFR 60, Subpart Db]

Certification  
Emergency Occurrence Report  
Part 70 Quarterly Report  
Quarterly Deviation and Compliance Monitoring Report

Attachment A: 40 CFR 63, Subpart CCC  
Attachment B: 40 CFR 60, Subpart Db

## SECTION A

## SOURCE SUMMARY

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

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

---

The Permittee owns and operates a stationary tin mill.

|                              |  |
|------------------------------|--|
| Source Address:              | 101 East 129th Street, East Chicago, Indiana 46312   |
| Mailing Address:             | One North Broadway, Mail Station 70A, East Chicago, IN 46312   |
| General Source Phone Number: | 219-888-6995   |
| SIC Code:                    | 3313 and 3316  |
| County Location:             | Lake   |
| Source Location Status:      | Nonattainment for 8-hour ozone standard<br>Nonattainment for PM2.5 standard<br>Attainment for all other criteria pollutants  |
| Source Status:               | Part 70 Operating Permit Program<br>Major Source, under PSD and Emission Offset and Nonattainment New Source Review Rules<br>Major Source, under Section 112 of the Clean Air Act<br>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)]

---

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

#### (a) Continuous Pickling Line

- (1) One (1) Pickle Line constructed in 1952 consisting of four (4) HCl process tanks and a water rinse tank with acid fumes controlled by one (1) packed tower scrubber with air flow of 22,000 acfm exhausting through stack (S5A).

#### (b) 6- Stand Cold Reduction Tandem Mill

- (1) One (1) 6 Stand Tandem Mill (emission unit EC-CR) containing six (6) stands (EC-CR0000) constructed in 1956 having a maximum capacity of 120 tons per hour. Oily mist is controlled using mist eliminator (EC-CR CD1) exhausting through two (2) stacks (S7A and S7A1).

#### (c) Continuous Annealing Line

- (1) One (1) Continuous Annealing Line (emission unit EC-CA) constructed in 1960 having a maximum capacity of 56 tons per hour consisting of the following:
  - (A) Two (2) alkali cleaning tanks (emission unit ECCA0020) with emissions controlled using a gas/fume washer (Rotoclone Type "N") (EC-CA CD1) exhausting through one (1) stack (S7D).
  - (B) One (1) non-contact brush scrubber (emission unit ECCA0021) having emissions exhausting into the building.

- (C) One (1) natural gas fired continuous annealing furnace having a maximum heat input capacity of 70 MMBtu per hour with emissions exhausting through one (1) stack (S7C).

**(d) Tin Free Steel Line (Chrome Line)**

- (1) One (1) Tin Free Steel Line (Chrome Line) (emission unit EC-CT) constructed in 1964 having a maximum capacity of 33.7 tons per hour consisting of the following:
  - (A) One (1) caustic NaOH cleaner tank (EC-CT0050) using a cleaning solution containing caustic soda at a maximum of 59.0 pounds per hour to clean steel coils. Emissions are controlled using a gas/fume washer (Rotoclone Type "N") exhausting through one (1) stack (S7F).
  - (B) One (1) Pickling process tank (EC-CT0051) using a pickling solution containing sulfuric acid at a maximum of 3.0 pounds per hour to process steel coils. Emissions are controlled by one (1) packed bed wet scrubber (EC-CT CD1) and exhausting through one (1) stack (S7E).
  - (C) One (1) Chrome Electroplating process (EC-CT0052) using a plating coating solution containing chromic acid at a maximum of 20.0 pounds per hour, sulfuric acid and silica fluoride at a maximum of 0.6 pounds per hour. Emissions are controlled by one (1) packed bed wet scrubber (EC-CT CD1) and exhausting through one (1) stack (S7E).
  - (D) One (1) Chemical Treatment Tank (EC-CT0053) using a solution containing chromic acid at a maximum of 3.0 pounds per hour. Emissions are controlled by one (1) packed bed wet scrubber (EC-CT CD1) and exhausting through one (1) stack (S7E).
  - (E) One (1) Chemical Treatment Rinse Tank (EC-CT0054) using water to rinse coils after chemical treatment with chromic acid. Emissions are controlled by one (1) packed bed wet scrubber (EC-CT CD1) and exhausting through one (1) stack (S7E).

**(e) Electrolytic Tinning Line (Tin Line)**

- (1) One (1) Electrolytic Tinning Line (Tin Line) constructed in 1956 having a maximum capacity of 48.5 tons per hour consisting of the following:
  - (A) Cleaning and Pickle Section:
    - (i) One (1) caustic NaOH cleaning tank (EC-TL0060) using a solution containing caustic soda at a maximum of 5.0 pounds per hour. Emissions are controlled using one (1) packed bed wet scrubber (EC-TL CD 1).
    - (ii) One (1) pickle tank (EC-TL 0061) using a solution containing sulfuric acid at a maximum of 6.0 pounds per hour. Emissions are controlled using one (1) packed bed wet Scrubber (EC-TL CD2).
    - (iii) Both scrubbers in the Cleaning and Pickling Section exhaust through a common stack (S7G).

(B) Tin Plating Section (Halogen Process):

- (i) One (1) set of tin plating cells 1-7 (SC-TL0063) with emissions controlled using one (1) packed bed wet scrubber (EC-TL CD3).
- (ii) One (1) set of tin plating cells 8-18 (SC-TL0062) with emissions controlled using one (1) packed bed wet scrubber (EC-TL CD4).
- (iii) One (1) set of tin plating cells 19-32 (SC-TL0064) with emissions controlled using one (1) packed bed wet scrubber (EC-TL CD5).
- (iv) The three (3) sets of plating cells (1-7, 8-18 and 19-32) combined use solutions containing sodium bifluoride at a maximum rate of 110.0 pounds per hour, sodium ferro cyanide at a maximum of 5.0 pounds per hour, polyethylene glycol at a maximum of 0.1 pounds per hour and hydrochloric acid at a maximum of 69.0 pounds per hour.
- (v) All three (3) scrubbers in the Tin Plating Section exhaust through a common stack (S7H).

(C) One (1) Chemical Treatment Section:

- (i) Coils exiting the Tin Plating Section may be treated with a solution containing sodium bichromate/dichromate at a maximum of 37.0 pounds per hour. Emissions from the one (1) chemical treatment tank are controlled by a packed bed scrubber (EC-TL CD6), exhausting through one (1) Stack (S7I).

**(f) Batch Annealing Operation**

- (1) One (1) Batch Annealing Operation (emission unit EC-BA) constructed in 1956 with a capacity of 48.5 tons per hour consisting of five (5) natural gas fired furnaces having a maximum heat input capacity of 16 MMBtu per hour each and nine (9) bases (ECBA0030 through ECBA0038). Emissions exhaust into the building and through the roof vent (V7A).

**(g) Steam Generation**

- (1) One (1) natural gas-fired steam generation boiler (emission unit B-1), approved in 2010 for construction, with a maximum heat input capacity of 181.8 MMBtu/hr, using low NOx burners and flue gas recirculation, and exhausting through one (1) stack (SS-1).

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

---

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

(a) Specifically regulated insignificant activities

- (1) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3]
- (2) Cleaners and solvents characterized as:

- (A) Having a vapor pressure equal to or less than two (2.0) kilo Pascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pound per square inch) measured at thirty-eight (38) degrees Centigrade (one hundred (100) degrees Fahrenheit); or
  - (B) Having a vapor pressure equal to or less than seven-tenths (0.7) kilo Pascal (five (5) millimeters of mercury or one-tenth (0.1) pound per square inch) measured at twenty (20) degrees Centigrade (sixty-eight (68) degrees Fahrenheit); the use of which, for all cleaners and solvents combined, does not exceed one hundred forty-five (145) gallons per twelve (12) months. [326 IAC 8-3]
- (3) The following equipment related to manufacturing activities not resulting in the emission of HAPs: Brazing, Cutting torches, Soldering, and Welding. [326 IAC 6.8-1-2]
  - (4) 2- Stand Tin Temper Mill  
One (1) Temper mill (emission unit EC-TM) containing two (2) stands (EC-TM 0042), constructed in 1956 having a maximum capacity of 48.5 tons per hour. Emissions are controlled by a baghouse (EC-TM CD1) exhausting inside the building. The baghouse was installed to improve the quality of the coils processed through the Temper Mill. [326 IAC 6.8-1-2]
  - (5) One (1) Electrolytic Cleaning line, (emission Unit EC-EC), constructed in 1956, having a maximum capacity of 48.5 tons per hour. The line consists of caustic cleaning tanks (EC-EC0010) and a brush scrubber (EC-EC0011). Emissions are controlled using a gas/fume washer (Rotoclone Type "N") (EC-EC CD1) exhausting through one (1) stack (S7B). [326 IAC 6.8-1-2]
  - (6) RCCP Recoil and Inspection Line [326 IAC 6.8-1-2]  
  
One (1) Recoil and Inspection Line RCCP (emission unit EC-RI) constructed in 1956, consisting of the following:
    - (A) One (1) Recoiler Unit (EC-RC) where coils are unwound for surface quality and edge alignment inspections and then recoiled for further processing or shipment to customers.
    - (B) One (1) Electrostatic Oiler, (emission unit EC-RI0040) with emissions exhausting to one (1) Stack (S7J).

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

---

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

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

## SECTION B GENERAL CONDITIONS

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

---

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

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

---

- (a) This permit, T089-27328-00300, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

---

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

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

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

---

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

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

---

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

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

---

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

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

---

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

---

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

- (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) 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]

---

- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (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).

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

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

---

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

- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, or Northwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

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

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

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

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

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

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

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

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

- (a) All terms and conditions of permits established prior to T089-27328-00300 and issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised under 326 IAC 2-7-10.5, or
  - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

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

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

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

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

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

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

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

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
  - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
  - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

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

Indiana Department of Environmental Management

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

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

---

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

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

---

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(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 the certification 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]**

---

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

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

---

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

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

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

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

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:  
  
Indiana Department of Environmental Management  
Permit Administration and Support Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
  
Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

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

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

**B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]**

---

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

## 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 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

#### C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
  - (A) Asbestos removal or demolition start date;
  - (B) Removal or demolition contractor; or
  - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

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

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**  
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Licensed Asbestos Inspector**  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

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

#### **C.7 Performance Testing [326 IAC 3-6]**

---

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

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

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

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual 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.8 Compliance Requirements [326 IAC 2-1.1-11]**

---

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

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

##### **C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]**

---

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

---

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

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

**C.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 shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval 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 180 days from the date on which this source commences operation.  
  
The ERP 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) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) 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]**

---

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]**

---

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

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
  - (1) initial inspection and evaluation;
  - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
  - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
  - (1) monitoring results;
  - (2) review of operation and maintenance procedures and records; and/or
  - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

**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 by 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]

---

- (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 reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
  - (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, document and maintain the following records:
    - (A) A description of the project.

- (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
- (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
  - (i) Baseline actual emissions;
  - (ii) Projected actual emissions;
  - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(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.
- (d) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
  - (1) 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
  - (2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]  
[326 IAC 2-2-2][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 not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (b) The address for report submittal is:  
  
Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (e) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(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 project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:
  - (1) The name, address, and telephone number of the major stationary source.
  - (2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.
  - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
  - (4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

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

- (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**

---

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 CONDITION**

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

**(a) Continuous Pickling Line**

- (1) One (1) Pickle Line constructed in 1952 consisting of four (4) HCl process tanks and a water rinse tank with acid fumes controlled by one (1) packed tower scrubber with air flow of 22,000 acfm exhausting through stack (S5A).

(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 [326 IAC 6.8-1-2]**

---

Pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions from the Pickle Line (S5A) shall not exceed 0.03 grain per dry standard cubic foot.

## SECTION D.2

## FACILITY OPERATION CONDITIONS

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

#### (b) 6- Stand Cold Reduction Tandem Mill

- (1) One (1) 6 Stand Tandem Mill (emission unit EC-CR) containing six (6) stands (EC-CR0000) constructed in 1956 having a maximum capacity of 120 tons per hour. Oily mist is controlled using mist eliminator (EC-CR CD1) exhausting through two (2) stacks (S7A and S7A1).

(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 [326 IAC 6.8-1-2]

---

Pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions from the 6-Stand Cold Reduction Tandem Mill shall not exceed 0.03 grain per dry standard cubic foot.

### Compliance Determination Requirements

#### D.2.2 Oily Mist Control

---

The mist eliminator shall be in operation at all times the 6-Stand Tandem Mill is in operation to control oily mist.

### Section D.3

### FACILITY OPERATION CONDITIONS

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

##### (c) Continuous Annealing Line

- (1) One (1) Continuous Annealing Line (emission unit EC-CA) constructed in 1960 having a maximum capacity of 56 tons per hour consisting of the following:
  - (A) Two (2) alkali cleaning tanks (emission unit ECCA0020) with emissions controlled using a gas/fume washer (Rotoclone Type "N") (EC-CA CD1) exhausting through one (1) stack (S7D).
  - (B) One (1) non-contact brush scrubber (emission unit ECCA0021) having emissions exhausting into the building.
  - (C) One (1) natural gas fired continuous annealing furnace having a maximum heat input capacity of 70 MMBtu per hour with emissions exhausting through one (1) stack (S7C).

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

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

##### D.3.1 Particulate [326 IAC 6.8-1-2]

---

Pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions from the Continuous Annealing Line shall not exceed 0.03 grain per dry standard cubic foot.

## Section D.4

## FACILITY OPERATION CONDITIONS

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

#### (d) Tin Free Steel Line (Chrome Line)

- (1) One (1) Tin Free Steel Line (Chrome Line) (emission unit EC-CT) constructed in 1964 having a maximum capacity of 33.7 tons per hour consisting of the following:
  - (A) One (1) caustic NaOH cleaner tank (EC-CT0050) using a cleaning solution containing caustic soda at a maximum of 59.0 pounds per hour to clean steel coils. Emissions are controlled using a gas/fume washer (Rotoclone Type "N") exhausting through one (1) stack (S7F).
  - (B) One (1) Pickling process tank (EC-CT0051) using a pickling solution containing sulfuric acid at a maximum of 3.0 pounds per hour to process steel coils. Emissions are controlled by one (1) packed bed wet scrubber (EC-CT CD1) and exhausting through one (1) stack (S7E).
  - (C) One (1) Chrome Electroplating process (EC-CT0052) using a plating coating solution containing chromic acid at a maximum of 20.0 pounds per hour, sulfuric acid and silica fluoride at a maximum of 0.6 pounds per hour. Emissions are controlled by one (1) packed bed wet scrubber (EC-CT CD1) and exhausting through one (1) stack (S7E).
  - (D) One (1) Chemical Treatment Tank (EC-CT0053) using a solution containing chromic acid at a maximum of 3.0 pounds per hour. Emissions are controlled by one (1) packed bed wet scrubber (EC-CT CD1) and exhausting through one (1) stack (S7E).
  - (E) One (1) Chemical Treatment Rinse Tank (EC-CT0054) using water to rinse coils after chemical treatment with chromic acid. Emissions are controlled by one (1) packed bed wet scrubber (EC-CT CD1) and exhausting through one (1) stack (S7E).

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

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

#### D.4.1 Particulate [326 IAC 6.8-1-2]

Pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions from the Tin Free Steel Line (Chrome Line) shall not exceed 0.03 grain per dry standard cubic foot.

## Section D.5

## FACILITY OPERATION CONDITIONS

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

#### (e) Electrolytic Tinning Line (Tin Line)

- (1) One (1) Electrolytic Tinning Line (Tin Line) constructed in 1956 having a maximum capacity of 48.5 tons per hour consisting of the following:
  - (A) Cleaning and Pickle Section:
    - (i) One (1) caustic NaOH cleaning tank (EC-TL0060) using a solution containing caustic soda at a maximum of 5.0 pounds per hour. Emissions are controlled using one (1) packed bed wet scrubber (EC-TL CD 1).
    - (ii) One (1) pickle tank (EC-TL 0061), using a solution containing sulfuric acid at a maximum of 6.0 pounds per hour. Emissions are controlled using one (1) packed bed wet Scrubber (EC-TL CD2).
    - (iii) Both scrubbers in the Cleaning and Pickling Section exhaust through a common stack (S7G).
  - (B) Tin Plating Section (Halogen Process):
    - (i) One (1) set of tin plating cells 1-7 (SC-TL0063) with emissions controlled using one (1) packed bed wet scrubber (EC-TL CD3).
    - (ii) One (1) set of tin plating cells 8-18 (SC-TL0062) with emissions controlled using one (1) packed bed wet scrubber (EC-TL CD4).
    - (iii) One (1) set of tin plating cells 19-32 (SC-TL0064) with emissions controlled using one (1) packed bed wet scrubber (EC-TL CD5).
    - (iv) The three (3) sets of plating cells (1-7, 8-18 and 19-32) combined use solutions containing sodium bifluoride at a maximum rate of 110.0 pounds per hour, sodium ferro cyanide at a maximum of 5.0 pounds per hour, polyethylene glycol at a maximum of 0.1 pounds per hour and hydrochloric acid at a maximum of 69.0 pounds per hour.
    - (v) All three (3) scrubbers in the Tin Plating Section exhaust through a common stack (S7H).
  - (C) One (1) Chemical Treatment Section:
    - (i) Coils exiting the Tin Plating Section may be treated with a solution containing sodium bichromate/dichromate at a maximum of 37.0 pounds per hour. Emissions from the one (1) chemical treatment tank are controlled by a packed bed scrubber (EC-TL CD6), exhausting through one (1) Stack (S7I).

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

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

#### **D.5.1 Particulate [326 IAC 6.8-1-2]**

---

Pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions from the Electrolytic Tinning Line (Tin Line) shall not exceed 0.03 grain per dry standard cubic foot.

**Section D.6**

**FACILITY OPERATION CONDITIONS**

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

**(f) Batch Annealing Operation**

- (1) One (1) Batch Annealing Operation (emission unit EC-BA) constructed in 1956 with a capacity of 48.5 tons per hour consisting of five (5) natural gas fired furnaces having a maximum heat input capacity of 16 MMBtu per hour each and nine (9) bases (ECBA0030 through ECBA0038). Emissions exhaust into the building and through the roof vent (V7A).

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

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

**D.6.1 Particulate [326 IAC 6.8-1-2]**

---

Pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions from the Batch Annealing Operations shall not exceed 0.03 grain per dry standard cubic foot.

## Section D.7

## FACILITY OPERATION CONDITIONS

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

#### (g) Steam Generation

- (1) One (1) natural gas-fired steam generation boiler (emission unit B-1), approved in 2010 for construction, with a maximum heat input capacity of 181.8 MMBtu/hr, using low NOx burners and flue gas recirculation, and exhausting through one (1) stack (SS-1).

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

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

#### D.7.1 Particulate Emissions [326 IAC 6.8-1-2]

Pursuant to 326 IAC 6.8-1-2(b)(3), the particulate matter emissions from the natural gas-fired steam generation boiler (emission unit B-1) shall not exceed 0.01 grain per dry standard cubic foot.

#### D.7.2 NOx PSD and Emission Offset Minor Limit [326 IAC 2-2] [326 IAC 2-3]

Pursuant to SPM No. 089-28872-00300, in order to make the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset) not applicable, the NOx emissions from the natural gas-fired steam generation boiler (emission unit B-1) shall be less than forty (40) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

#### D.7.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for this facility. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

### Compliance Determination Requirements

#### D.7.4 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 3-5] [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)(A)(iii)]

- (a) Pursuant to 326 IAC 3-5-1(b)(1) and (2) and in order to determine compliance with Condition D.7.2, no later than one hundred eighty (180) days of startup of emission unit B-1, the Permittee shall install, calibrate, maintain, operate, and certify a continuous emission monitoring system (CEMS) and related equipment for measuring NOx emissions from emission unit B-1 in accordance with 326 IAC 3-5 and 40 CFR 60, Subpart Db.
- (b) The NOx CEMS shall be operated at all times emission unit B-1 is in operation except for system breakdowns, repairs, calibration checks, and zero and span adjustments.
- (c) Whenever the NOx CEMS is down for more than twenty-four (24) hours, the Permittee shall follow best combustion practices to minimize NOx emissions until the CEMS is brought back online.
- (d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a CEMS pursuant to 40 CFR 60.

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

#### D.7.5 Record Keeping Requirements

- (a) To document the compliance status with Condition D.7.2, the Permittee shall maintain records of the NOx CEMS output. Records shall be complete and sufficient to establish compliance with the NOx limit in Condition D.7.2 on a monthly basis.

- (b) The Permittee shall perform the required record keeping pursuant to 326 IAC 3-5-4 and 326 IAC 3-5-6.
- (c) In the event that a breakdown of the NOx CEMS occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (d) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligations with regard to the records required by this condition.

#### D.7.6 Reporting Requirements

---

- (a) A quarterly summary of the monthly NOx emissions to document the compliance status with Condition D.7.2 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-71-(34).
- (b) The Permittee shall perform the required reporting pursuant to 326 IAC 3-5-4, 326 IAC 3-5-5, and 326 IAC 3-5-7.

## Section D.8 FACILITY OPERATION CONDITIONS

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

- (a) Specifically regulated insignificant activities
- (1) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3]
  - (2) Cleaners and solvents characterized as:
    - (A) Having a vapor pressure equal to or less than two (2.0) kilo Pascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pound per square inch) measured at thirty-eight (38) degrees Centigrade (one hundred (100) degrees Fahrenheit); or
    - (B) Having a vapor pressure equal to or less than seven-tenths (0.7) kilo Pascal (five (5) millimeters of mercury or one-tenth (0.1) pound per square inch) measured at twenty (20) degrees Centigrade (sixty-eight (68) degrees Fahrenheit); the use of which, for all cleaners and solvents combined, does not exceed one hundred forty-five (145) gallons per twelve (12) months. [326 IAC 8-3]
  - (3) The following equipment related to manufacturing activities not resulting in the emission of HAPs: Brazing, Cutting torches, Soldering, and Welding. [326 IAC 6.8-1-2]
  - (4) 2- Stand Tin Temper Mill  
One (1) Temper mill (emission unit EC-TM) containing two (2) stands (EC-TM 0042), constructed in 1956 having a maximum capacity of 48.5 tons per hour. Emissions are controlled by a baghouse (EC-TM CD1) exhausting inside the building. The baghouse was installed to improve the quality of the coils processed through the Temper Mill. [326 IAC 6.8-1-2]
  - (5) One (1) Electrolytic Cleaning line, (emission Unit EC-EC), constructed in 1956, having a maximum capacity of 48.5 tons per hour. The line consists of caustic cleaning tanks (EC-EC0010) and a brush scrubber (EC-EC0011). Emissions are controlled using a gas/fume washer (Rotoclone Type "N") (EC-EC CD1) exhausting through one (1) stack (S7B). [326 IAC 6.8-1-2]
  - (6) RCCP Recoil and Inspection Line [326 IAC 6.8-1-2]  
One (1) Recoil and Inspection Line RCCP (emission unit EC-RI) constructed in 1956, consisting of the following:
    - (A) One (1) Recoiler Unit (EC-RC) where coils are unwound for surface quality and edge alignment inspections and then recoiled for further processing or shipment to customers.
    - (B) One (1) Electrostatic Oiler, (emission unit EC-RI0040) with emissions exhausting to one (1) Stack (S7J).

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

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

### **D.8.1 Particulate [326 IAC 6.8-1-2]**

---

Pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions from the 2-Stand Temper Mill, the Electrolytic Cleaning line, the RCCP Recoil and Inspection Line and the brazing, Cutting torches, Soldering, and Welding shall not exceed 0.03 grain per dry standard cubic foot.

### **D.8.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]**

---

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

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

### **D.8.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-8]**

---

Pursuant to 326 IAC 8-3-8 (Material requirements for cold cleaning degreasers), the users, providers, and manufacturers of solvents for use in cold cleaning degreasers in Clark, Floyd, Lake, and Porter Counties, except for solvents intended to be used to clean electronic components shall do the following:

- (a) On and after November 1, 1999, no person shall Operate a cold cleaning degreaser with a solvent vapor pressure that exceeds two (2) millimeters of mercury (thirty-eight thousandths (0.038) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).
- (b) On and after May 1, 2001, no person shall Operate a cold cleaning degreaser with a solvent vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).
- (c) On and after November 1, 1999, all persons subject to the requirements of 326 IAC 8-3-8 (c)(1)(B) and (c)(2)(B) shall maintain each of the following records for each purchase:
  - (1) The name and address of the solvent supplier.
  - (2) The date of purchase.
  - (3) The type of solvent.
  - (4) The volume of each unit of solvent.
  - (5) The total volume of the solvent.
  - (6) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

- (d) All records required by 326 IAC 8-3-8 (d) shall be retained on-site for the most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period.

**SECTION E.1 National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements  
[326 IAC 2-7-5(1)][326 IAC 20-29][40 CFR 63, Subpart CCC]**

**Affected Emissions Unit Description:**

**(a) Continuous Pickling Line**

- (1) One (1) Pickle Line constructed in 1952 consisting of four (4) HCl process tanks and a water rinse tank with acid fumes controlled by one (1) packed tower scrubber with air flow of 22,000 acfm exhausting through stack (S5A).

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

**E.1.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]**

- (a) Pursuant to 40 CFR 63. 63.1155, the Permittee shall comply with the provisions of 40 CFR Part 63 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the Continuous Pickling Line except as otherwise specified in 40 CFR Part 63, Subpart CCC.
- (b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

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

**E.1.2 National Emission Standards for Hazardous Air Pollutants for Steel Pickling-HCl Process Facilities and Hydrochloric Acid Regeneration Plants [326 IAC 20-29] [40 CFR 63, Subpart CCC]**

The Permittee which engages in the steel pickling-HCl process shall comply with the following provisions of 40 CFR 63, Subpart CCC (included as Attachment A of this permit), with a compliance date of June 22, 2001:

- (1) 40 CFR 63.1155
- (2) 40 CFR 63.1156
- (3) 40 CFR 63.1157(a)
- (4) 40 CFR 63.1159(b)
- (5) 40 CFR 63.1160
- (6) 40 CFR 63.1161(a), (b) and (d)
- (7) 40 CFR 63.1162(a) and (c)
- (8) 40 CFR 63.1163
- (9) 40 CFR 63.1164
- (10) 40 CFR 63.1165
- (11) Table 1 to Subpart CCC of Part 63

**SECTION E.2 New Source Performance Standards for Industrial-Commercial-Institutional Steam Generating Units Requirements [326 IAC 2-7-5(1)][326 IAC 12][40 CFR 60, Subpart Db]**

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

**(g) Steam Generation**

- (1) One (1) natural gas-fired steam generation boiler (emission unit B-1), approved in 2010 for construction, with a maximum heat input capacity of 181.8 MMBtu/hr, using low NOx burners and flue gas recirculation, and exhausting through one (1) stack (SS-1).

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

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

The provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to the facilities described in this section except when otherwise specified in 40 CFR 60, Subpart Db.

**E.2.2 Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units [40 CFR 60, Subpart Db]**

Pursuant to 40 CFR Part 60, Subpart Db, the Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Db (included as Attachment B of this permit):

- (1) 40 CFR 60.40b(a)
- (2) 40 CFR 60.41b
- (3) 40 CFR 60.42b(k)(2)
- (4) 40 CFR 60.44b(a)(1), (h), (i)
- (5) 40 CFR 60.46b(a), (c), (e)
- (6) 40 CFR 60.48b(b)(1), (c), (d), (e)(2), (f)
- (7) 40 CFR 60.49b(a), (b), (d), (g), (h)(2), (i), (o), (r)(1), (v), (w)

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: U.S. Steel - East Chicago Tin Products  
Source Address: 101 East 129th Street, East Chicago, Indiana 46312  
Mailing Address: One North Broadway, Mail Station 70A, East Chicago, IN 46312  
Part 70 Permit No.: T089-27328-00300

**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: U.S. Steel - East Chicago Tin Products  
Source Address: 101 East 129th Street, East Chicago, Indiana 46312  
Mailing Address: One North Broadway, Mail Station 70A, East Chicago, IN 46312  
Part 70 Permit No.: T089-27328-00300

**This form consists of 2 pages**

**Page 1 of 2**

- This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) daytime business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
  - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

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

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

**Page 2 of 2**

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

Form Completed by: \_\_\_\_\_

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

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

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

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

**Part 70 Quarterly Report**

Source Name: U.S. Steel - East Chicago Tin Products  
Source Address: 101 East 129th Street, East Chicago, Indiana 46312  
Mailing Address: One North Broadway, Mail Station 70A, East Chicago, IN 46312  
Part 70 Permit No.: T089-27328-00300  
Facility: Emission Unit B-1  
Parameter: NOx emissions  
Limit: Shall be less than forty (40) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER :

YEAR:

| Month   | NOx Emissions (tons) | NOx Emissions (tons) | NOx Emissions (tons) |
|---------|----------------------|----------------------|----------------------|
|         | This Month           | Previous 11 Months   | 12 Month Total       |
| Month 1 |                      |                      |                      |
| Month 2 |                      |                      |                      |
| Month 3 |                      |                      |                      |

No deviation occurred in this quarter.

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

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

**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: U.S. Steel - East Chicago Tin Products  
 Source Address: 101 East 129th Street, East Chicago, Indiana 46312  
 Mailing Address: One North Broadway, Mail Station 70A, East Chicago, IN 46312  
 Part 70 Permit No.: T089-27328-00300

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

|   |                               |
|---|-------------------------------|
| 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". |                               |
| <input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.  |                               |
| <input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD  |                               |
| <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 (specify permit condition #)</b> |                               |
| <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 (specify permit condition #)</b> |                               |
| <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 (specify permit condition #)</b> |                               |
| <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**  
**to Part 70 Operating Permit Renewal No. T089-27328-00300**

U.S. Steel - East Chicago Tin Products  
101 E 129th St, East Chicago, IN 46312

**40 CFR 60, Subpart CCC—National Emission Standards for Hazardous Air Pollutants for Steel Pickling—HCl Process Facilities and Hydrochloric Acid Regeneration Plants**

**Source:** 64 FR 33218, June 22, 1999, unless otherwise noted.

**§ 63.1155 Applicability.**

(a) The provisions of this subpart apply to the following facilities and plants that are major sources for hazardous air pollutants (HAP) or are parts of facilities that are major sources for HAP:

(1) All new and existing steel pickling facilities that pickle carbon steel using hydrochloric acid solution that contains 6 percent or more by weight HCl and is at a temperature of 100 °F or higher; and

(2) All new and existing hydrochloric acid regeneration plants.

(3) The provisions of this subpart do not apply to facilities that pickle carbon steel without using hydrochloric acid, to facilities that pickle only specialty steel, or to acid regeneration plants that regenerate only acids other than hydrochloric acid.

(b) For the purposes of implementing this subpart, the affected sources at a facility or plant subject to this subpart are as follows: Continuous and batch pickling lines, hydrochloric acid regeneration plants, and hydrochloric acid storage vessels.

(c) Table 1 to this subpart specifies the provisions of this part 63, subpart A that apply and those that do not apply to owners and operators of steel pickling facilities and hydrochloric acid regeneration plants subject to this subpart.

**§ 63.1156 Definitions.**

Terms used in this subpart are defined in the Clean Air Act, in subpart A of this part, or in this section as follows:

*Batch pickling line* means the collection of equipment and tanks configured for pickling metal in any form but usually in discrete shapes where the material is lowered in batches into a bath of acid solution, allowed to remain until the scale is dissolved, then removed from the solution, drained, and rinsed by spraying or immersion in one or more rinse tanks to remove residual acid.

*Carbon steel* means steel that contains approximately 2 percent or less carbon, 1.65 percent or less manganese, 0.6 percent or less silicon, and 0.6 percent or less copper.

*Closed-vent system* means a system that is not open to the atmosphere and that is composed of piping, ductwork, connections, and, if necessary, flow-inducing devices that transport emissions from a process unit or piece of equipment (e.g., pumps, pressure relief devices, sampling connections, open-ended valves or lines, connectors, and instrumentation systems) back into a closed system or into any device that is capable of reducing or collecting emissions.

*Continuous pickling line* means the collection of equipment and tanks configured for pickling metal strip, rod, wire, tube, or pipe that is passed through an acid solution in a continuous or nearly continuous manner and rinsed in another tank or series of tanks to remove residual acid. This definition includes continuous spray towers.

*Hydrochloric acid regeneration plant* means the collection of equipment and processes configured to reconstitute fresh hydrochloric acid pickling solution from spent pickle liquor using a thermal treatment process.

*Hydrochloric acid regeneration plant production mode* means operation under conditions that result in production of usable regenerated acid or iron oxide.

*Hydrochloric acid storage vessel* means a stationary vessel used for the bulk containment of virgin or regenerated hydrochloric acid.

*Responsible maintenance official* means a person designated by the owner or operator as having the knowledge and the authority to sign records and reports required under this rule.

*Specialty steel* means a category of steel that includes silicon electrical, alloy, tool, and stainless steels.

*Spray tower* means an enclosed vertical tower in which acid pickling solution is sprayed onto moving steel strip in multiple vertical passes.

*Steel pickling* means the chemical removal of iron oxide mill scale that is formed on steel surfaces during hot rolling or hot forming of semi-finished steel products through contact with an aqueous solution of acid where such contact occurs prior to shaping or coating of the finished steel product. This definition does not include removal of light rust or scale from finished steel products or activation of the metal surface prior to plating or coating.

*Steel pickling facility* means any facility that operates one or more batch or continuous steel pickling lines.

#### **§ 63.1157 Emission standards for existing sources.**

(a) *Pickling lines.* No owner or operator of an existing affected continuous or batch pickling line at a steel pickling facility shall cause or allow to be discharged into the atmosphere from the affected pickling line:

- (1) Any gases that contain HCl in a concentration in excess of 18 parts per million by volume (ppmv); or
- (2) HCl at a mass emission rate that corresponds to a collection efficiency of less than 97 percent.

(b) *Hydrochloric acid regeneration plants.* (1) No owner or operator of an existing affected plant shall cause or allow to be discharged into the atmosphere from the affected plant any gases that contain HCl in a concentration greater than 25 ppmv.

(2) In addition to the requirement of paragraph (b)(1) of this section, no owner or operator of an existing affected plant shall cause or allow to be discharged into the atmosphere from the affected plant any gases that contain chlorine (Cl<sub>2</sub>) in a concentration in excess of either 6 ppmv or an alternative source-specific maximum concentration. The source-specific maximum concentration standard shall be established according to §63.1161(c)(2) of this subpart.

**§ 63.1158 Emission standards for new or reconstructed sources.**

(a) *Pickling lines*—(1) *Continuous pickling lines*. No owner or operator of a new or reconstructed affected continuous pickling line at a steel pickling facility shall cause or allow to be discharged into the atmosphere from the affected pickling line:

(i) Any gases that contain HCl in a concentration in excess of 6 ppmv; or

(ii) HCl at a mass emission rate that corresponds to a collection efficiency of less than 99 percent.

(2) *Batch pickling lines*. No owner or operator of a new or reconstructed affected batch pickling line at a steel pickling facility shall cause or allow to be discharged into the atmosphere from the affected pickling line:

(i) Any gases that contain HCl in a concentration in excess of 18 ppmv; or

(ii) HCl at a mass emission rate that corresponds to a collection efficiency of less than 97 percent.

(b) *Hydrochloric acid regeneration plants*. (1) No owner or operator of a new or reconstructed affected plant shall cause or allow to be discharged into the atmosphere from the affected plant any gases that contain HCl in a concentration greater than 12 ppmv.

(2) In addition to the requirement of paragraph (b)(1) of this section, no owner or operator of a new or reconstructed affected plant shall cause or allow to be discharged into the atmosphere from the affected plant any gases that contain Cl<sub>2</sub> in a concentration in excess of 6 ppmv.

**§ 63.1159 Operational and equipment standards for existing, new, or reconstructed sources.**

(a) *Hydrochloric acid regeneration plant*. The owner or operator of an affected plant must operate the affected plant at all times while in production mode in a manner that minimizes the proportion of excess air fed to the process and maximizes the process offgas temperature consistent with producing usable regenerated acid or iron oxide.

(b) *Hydrochloric acid storage vessels*. The owner or operator of an affected vessel shall provide and operate, except during loading and unloading of acid, a closed-vent system for each vessel. Loading and unloading shall be conducted either through enclosed lines or each point where the acid is exposed to the atmosphere shall be equipped with a local fume capture system, ventilated through an air pollution control device.

**§ 63.1160 Compliance dates and maintenance requirements.**

(a) *Compliance dates*. (1) The owner or operator of an affected existing steel pickling facility and/or hydrochloric acid regeneration plant subject to this subpart shall achieve initial compliance with the requirements of this subpart no later than June 22, 2001.

(2) The owner or operator of a new or reconstructed steel pickling facility and/or hydrochloric acid regeneration plant subject to this subpart that commences construction or reconstruction after September 18, 1997, shall achieve compliance with the requirements of this subpart immediately upon startup of operations or by June 22, 1999, whichever is later.

(b) *Maintenance requirements*. (1) The owner or operator of an affected source shall comply with the operation and maintenance requirements prescribed under §63.6(e) of subpart A of this part.

(2) In addition to the requirements specified in paragraph (b)(1) of this section, the owner or operator shall prepare an operation and maintenance plan for each emission control device to be implemented no later than the compliance date. The plan shall be incorporated by reference into the source's title V permit. All such plans must be consistent with good maintenance practices and, for a scrubber emission control device, must at a minimum:

(i) Require monitoring and recording the pressure drop across the scrubber once per shift while the scrubber is operating in order to identify changes that may indicate a need for maintenance;

(ii) Require the manufacturer's recommended maintenance at the recommended intervals on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in addition to exhaust system and scrubber fans and motors associated with those pumps and fans;

(iii) Require cleaning of the scrubber internals and mist eliminators at intervals sufficient to prevent buildup of solids or other fouling;

(iv) Require an inspection of each scrubber at intervals of no less than 3 months with:

(A) Cleaning or replacement of any plugged spray nozzles or other liquid delivery devices;

(B) Repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components;

(C) Repair or replacement of droplet eliminator elements as needed;

(D) Repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber; and

(E) Adjustment of damper settings for consistency with the required air flow.

(v) If the scrubber is not equipped with a viewport or access hatch allowing visual inspection, alternate means of inspection approved by the Administrator may be used.

(vi) The owner or operator shall initiate procedures for corrective action within 1 working day of detection of an operating problem and complete all corrective actions as soon as practicable. Procedures to be initiated are the applicable actions that are specified in the maintenance plan. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirement of this subpart.

(vii) The owner or operator shall maintain a record of each inspection, including each item identified in paragraph (b)(2)(iv) of this section, that is signed by the responsible maintenance official and that shows the date of each inspection, the problem identified, a description of the repair, replacement, or other corrective action taken, and the date of the repair, replacement, or other corrective action taken.

(3) The owner or operator of each hydrochloric acid regeneration plant shall develop and implement a written maintenance program. The program shall require:

(i) Performance of the manufacturer's recommended maintenance at the recommended intervals on all required systems and components;

(ii) Initiation of procedures for appropriate and timely repair, replacement, or other corrective action within 1 working day of detection; and

(iii) Maintenance of a daily record, signed by a responsible maintenance official, showing the date of each inspection for each requirement, the problems found, a description of the repair, replacement, or other action taken, and the date of repair or replacement.

#### **§ 63.1161 Performance testing and test methods.**

(a) *Demonstration of compliance.* The owner or operator shall conduct an initial performance test for each process or emission control device to determine and demonstrate compliance with the applicable emission limitation according to the requirements in §63.7 of subpart A of this part and in this section.

(1) Following approval of the site-specific test plan, the owner or operator shall conduct a performance test for each process or control device to either measure simultaneously the mass flows of HCl at the inlet and the outlet of the control device (to determine compliance with the applicable collection efficiency standard) or measure the concentration of HCl (and Cl<sub>2</sub> for hydrochloric acid regeneration plants) in gases exiting the process or the emission control device (to determine compliance with the applicable emission concentration standard).

(2) Compliance with the applicable concentration standard or collection efficiency standard shall be determined by the average of three consecutive runs or by the average of any three of four consecutive runs. Each run shall be conducted under conditions representative of normal process operations.

(3) Compliance is achieved if either the average collection efficiency as determined by the HCl mass flows at the control device inlet and outlet is greater than or equal to the applicable collection efficiency standard, or the average measured concentration of HCl or Cl<sub>2</sub> exiting the process or the emission control device is less than or equal to the applicable emission concentration standard.

(b) *Establishment of scrubber operating parameters.* During the performance test for each emission control device, the owner or operator using a wet scrubber to achieve compliance shall establish site-specific operating parameter values for the minimum scrubber makeup water flow rate and, for scrubbers that operate with recirculation, the minimum recirculation water flow rate. During the emission test, each operating parameter must be monitored continuously and recorded with sufficient frequency to establish a representative average value for that parameter, but no less frequently than once every 15 minutes. The owner or operator shall determine the operating parameter monitoring values as the averages of the values recorded during any of the runs for which results are used to establish the emission concentration or collection efficiency per paragraph (a)(2) of this section. An owner or operator may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, an owner or operator may reestablish compliant operating parameter values as part of any performance test that is conducted subsequent to the initial test or tests.

(c) *Establishment of hydrochloric acid regeneration plant operating parameters.* (1) During the performance test for hydrochloric acid regeneration plants, the owner or operator shall establish site-specific operating parameter values for the minimum process offgas temperature and the maximum proportion of excess air fed to the process as described in §63.1162(b)(1) of this subpart. During the emission test, each operating parameter must be monitored and recorded with sufficient frequency to establish a representative average value for that parameter, but no less frequently than once every 15 minutes for parameters that are monitored continuously. Amount of iron in the spent pickle liquor shall be determined for each run by sampling the liquor every 15 minutes and analyzing a composite of the samples. The owner or operator shall determine the compliant monitoring values as the averages of the values recorded during any of the runs for which results are used to establish the emission concentration per paragraph (a)(2) of this section. An owner or operator may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, an owner or operator may reestablish compliant operating parameter values as part of any performance test that is conducted subsequent to the initial test or tests.

(2) During this performance test, the owner or operator of an existing affected plant may establish an alternative concentration standard if the owner or operator can demonstrate to the Administrator's satisfaction that the plant cannot meet a concentration limitation for  $\text{Cl}_2$  of 6 ppmv when operated within its design parameters. The alternative concentration standard shall be established through performance testing while the plant is operated at maximum design temperature and with the minimum proportion of excess air that allows production of iron oxide of acceptable quality while measuring the  $\text{Cl}_2$  concentration in the process exhaust gas. The measured concentration shall be the concentration standard for that plant.

(d) *Test methods.* (1) The following test methods in appendix A of 40 CFR part 60 shall be used to determine compliance under §§63.1157(a), 63.1157(b), 63.1158(a), and 63.1158(b) of this subpart:

(i) Method 1, to determine the number and location of sampling points, with the exception that no traverse point shall be within one inch of the stack or duct wall;

(ii) Method 2, to determine gas velocity and volumetric flow rate;

(iii) Method 3, to determine the molecular weight of the stack gas;

(iv) Method 4, to determine the moisture content of the stack gas; and

(v) Method 26A, "Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources—Isokinetic Method," to determine the HCl mass flows at the inlet and outlet of a control device or the concentration of HCl discharged to the atmosphere, and also to determine the concentration of  $\text{Cl}_2$  discharged to the atmosphere from acid regeneration plants. If compliance with a collection efficiency standard is being demonstrated, inlet and outlet measurements shall be performed simultaneously. The minimum sampling time for each run shall be 60 minutes and the minimum sample volume 0.85 dry standard cubic meters (30 dry standard cubic feet). The concentrations of HCl and  $\text{Cl}_2$  shall be calculated for each run as follows:

$$C_{\text{HCl}}(\text{ppmv}) = 0.659 C_{\text{HCl}}(\text{mg/dscm}),$$

$$\text{and } C_{\text{Cl}_2}(\text{ppmv}) = 0.339 C_{\text{Cl}_2}(\text{mg/dscm}),$$

where  $C(\text{ppmv})$  is concentration in ppmv and  $C(\text{mg/dscm})$  is concentration in milligrams per dry standard cubic meter as calculated by the procedure given in Method 26A.

(2) The owner or operator may use equivalent alternative measurement methods approved by the Administrator.

### **§ 63.1162 Monitoring requirements.**

(a) The owner or operator of a new, reconstructed, or existing steel pickling facility or acid regeneration plant subject to this subpart shall:

(1) Conduct performance tests to measure the HCl mass flows at the control device inlet and outlet or the concentration of HCl exiting the control device according to the procedures described in §63.1161 of this subpart. Performance tests shall be conducted either annually or according to an alternative schedule that is approved by the applicable permitting authority, but no less frequently than every 2 1/2 years or twice per title V permit term. If any performance test shows that the HCl emission limitation is being exceeded, then the owner or operator is in violation of the emission limit.

(2) In addition to conducting performance tests, if a wet scrubber is used as the emission control device, install, operate, and maintain systems for the measurement and recording of the scrubber makeup water flow rate and, if required, recirculation water flow rate. These flow rates must be monitored continuously and recorded at least once per shift while the scrubber is operating. Operation of the wet scrubber with excursions of scrubber makeup water flow rate and recirculation water flow rate less than the minimum values established during the performance test or tests will require initiation of corrective action as specified by the maintenance requirements in §63.1160(b)(2) of this subpart.

(3) If an emission control device other than a wet scrubber is used, install, operate, and maintain systems for the measurement and recording of the appropriate operating parameters.

(4) Failure to record each of the operating parameters listed in paragraph (a)(2) of this section is a violation of the monitoring requirements of this subpart.

(5) Each monitoring device shall be certified by the manufacturer to be accurate to within 5 percent and shall be calibrated in accordance with the manufacturer's instructions but not less frequently than once per year.

(6) The owner or operator may develop and implement alternative monitoring requirements subject to approval by the Administrator.

(b) The owner or operator of a new, reconstructed, or existing acid regeneration plant subject to this subpart shall also install, operate, and maintain systems for the measurement and recording of the:

(1) Process offgas temperature, which shall be monitored continuously and recorded at least once every shift while the facility is operating in production mode; and

(2) Parameters from which proportion of excess air is determined. Proportion of excess air shall be determined by a combination of total air flow rate, fuel flow rate, spent pickle liquor addition rate, and amount of iron in the spent pickle liquor, or by any other combination of parameters approved by the Administrator in accordance with §63.8(f) of subpart A of this part. Proportion of excess air shall be determined and recorded at least once every shift while the plant is operating in production mode.

(3) Each monitoring device must be certified by the manufacturer to be accurate to within 5 percent and must be calibrated in accordance with the manufacturer's instructions but not less frequently than once per year.

(4) Operation of the plant with the process offgas temperature lower than the value established during performance testing or with the proportion of excess air greater than the value established during performance testing is a violation of the operational standard specified in §63.1159(a) of this subpart.

(c) The owner or operator of an affected hydrochloric acid storage vessel shall inspect each vessel semiannually to determine that the closed-vent system and either the air pollution control device or the enclosed loading and unloading line, whichever is applicable, are installed and operating when required.

### **§ 63.1163 Notification requirements.**

(a) *Initial notifications.* As required by §63.9(b) of subpart A of this part, the owner or operator shall submit the following written notifications to the Administrator:

(1) The owner or operator of an area source that subsequently becomes subject to the requirements of the standard shall provide notification to the applicable permitting authority as required by §63.9(b)(1) of subpart A of this part.

(2) As required by §63.9(b)(2) of subpart A of this part, the owner or operator of an affected source that has an initial startup before June 22, 1999, shall notify the Administrator that the source is subject to the requirements of the standard. The notification shall be submitted not later than October 20, 1999 (or within 120 calendar days after the source becomes subject to this standard), and shall contain the information specified in §§63.9(b)(2)(i) through 63.9(b)(2)(v) of subpart A of this part.

(3) As required by §63.9(b)(3) of subpart A of this part, the owner or operator of a new or reconstructed affected source, or a source that has been reconstructed such that it is an affected source, that has an initial startup after the effective date and for which an application for approval of construction or reconstruction is not required under §63.5(d) of subpart A of this part, shall notify the Administrator in writing that the source is subject to the standards no later than 120 days after initial startup. The notification shall contain the information specified in §§63.9(b)(2)(i) through 63.9(b)(2)(v) of subpart A of this part, delivered or postmarked with the notification required in §63.9(b)(5) of subpart A of this part.

(4) As required by §63.9(b)(4) of subpart A of this part, the owner or operator of a new or reconstructed major affected source that has an initial startup after June 22, 1999, and for which an application for approval of construction or reconstruction is required under §63.5(d) of subpart A of this part shall provide the information specified in §§63.9(b)(4)(i) through 63.9(b)(4)(v) of subpart A of this part.

(5) As required by §63.9(b)(5) of subpart A of this part, the owner or operator who, after June 22, 1999, intends to construct a new affected source or reconstruct an affected source subject to this standard, or reconstruct a source such that it becomes an affected source subject to this standard, shall notify the Administrator, in writing, of the intended construction or reconstruction.

(b) *Request for extension of compliance.* As required by §63.9(c) of subpart A of this part, if the owner or operator of an affected source cannot comply with this standard by the applicable compliance date for that source, or if the owner or operator has installed BACT or technology to meet LAER consistent with §63.6(i)(5) of subpart A of this part, he/she may submit to the Administrator (or the State with an approved permit program) a request for an extension of compliance as specified in §§63.6(i)(4) through 63.6(i)(6) of subpart A of this part.

(c) *Notification that source is subject to special compliance requirements.* As required by §63.9(d) of subpart A of this part, an owner or operator of a new source that is subject to special compliance requirements as specified in §§63.6(b)(3) and 63.6(b)(4) of subpart A of this part shall notify the Administrator of his/her compliance obligations not later than the notification dates established in §63.9(b) of subpart A of this part for new sources that are not subject to the special provisions.

(d) *Notification of performance test.* As required by §63.9(e) of subpart A of this part, the owner or operator of an affected source shall notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, to allow the Administrator to review and approve the site-specific test plan required under §63.7(c) of subpart A of this part and, if requested by the Administrator, to have an observer present during the test.

(e) *Notification of compliance status.* The owner or operator of an affected source shall submit a notification of compliance status as required by §63.9(h) of subpart A of this part when the source becomes subject to this standard.

#### **§ 63.1164 Reporting requirements.**

(a) *Reporting results of performance tests.* As required by §63.10(d)(2) of subpart A of this part, the owner or operator of an affected source shall report the results of any performance test as part of the notification of compliance status required in §63.1163 of this subpart.

(b) *Progress reports.* The owner or operator of an affected source who is required to submit progress reports under §63.6(i) of subpart A of this part shall submit such reports to the Administrator (or the State with an approved permit program) by the dates specified in the written extension of compliance.

(c) *Periodic startup, shutdown, and malfunction reports.* Section 63.6(e) of subpart A of this part requires the owner or operator of an affected source to operate and maintain each affected emission source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the level required by the standard at all times, including during any period of startup, shutdown, or malfunction. Malfunctions must be corrected as soon as practicable after their occurrence.

(1) *Plan.* As required by §63.6(e)(3) of subpart A of this part, the owner or operator shall develop a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, or malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the relevant standards.

(2) *Reports.* As required by §63.10(d)(5)(i) of subpart A of this part, if actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction plan, the owner or operator shall state such information in a semiannual report. The report, to be certified by the owner or operator or other responsible official, shall be submitted semiannually and delivered or postmarked by the 30th day following the end of each calendar half; and

(3) *Immediate reports.* Any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the owner or operator shall comply with all requirements of §63.10(d)(5)(ii) of subpart A of this part.

[64 FR 33218, June 22, 1999, as amended at 71 FR 20458, Apr. 20, 2006]

### **§ 63.1165 Recordkeeping requirements.**

(a) *General recordkeeping requirements.* As required by §63.10(b)(2) of subpart A of this part, the owner or operator shall maintain records for 5 years from the date of each record of:

(1) The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);

(2) The occurrence and duration of each malfunction of the air pollution control equipment;

(3) All maintenance performed on the air pollution control equipment;

(4) Actions taken during periods of startup, shutdown, and malfunction and the dates of such actions (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when these actions are different from the procedures specified in the startup, shutdown, and malfunction plan;

(5) All information necessary to demonstrate conformance with the startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. This information can be recorded in a checklist or similar form (see §63.10(b)(2)(v) of subpart A of this part);

(6) All required measurements needed to demonstrate compliance with the standard and to support data that the source is required to report, including, but not limited to, performance test measurements (including initial and any subsequent performance tests) and measurements as may be necessary to determine the conditions of the initial test or subsequent tests;

(7) All results of initial or subsequent performance tests;

(8) If the owner or operator has been granted a waiver from recordkeeping or reporting requirements under §63.10(f) of subpart A of this part, any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements;

(9) If the owner or operator has been granted a waiver from the initial performance test under §63.7(h) of subpart A of this part, a copy of the full request and the Administrator's approval or disapproval;

(10) All documentation supporting initial notifications and notifications of compliance status required by §63.9 of subpart A of this part; and

(11) Records of any applicability determination, including supporting analyses.

(b) *Subpart CCC records.* (1) In addition to the general records required by paragraph (a) of this section, the owner or operator shall maintain records for 5 years from the date of each record of:

(i) Scrubber makeup water flow rate and recirculation water flow rate if a wet scrubber is used;

(ii) Calibration and manufacturer certification that monitoring devices are accurate to within 5 percent; and

(iii) Each maintenance inspection and repair, replacement, or other corrective action.

(2) The owner or operator of an acid regeneration plant shall also maintain records for 5 years from the date of each record of process offgas temperature and parameters that determine proportion of excess air.

(3) The owner or operator shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Administrator for the life of the affected source or until the source is no longer subject to the provisions of this subpart. In addition, if the operation and maintenance plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the plan on record to be made available for inspection by the Administrator for a period of 5 years after each revision to the plan.

(c) *Recent records.* General records and subpart CCC records for the most recent 2 years of operation must be maintained on site. Records for the previous 3 years may be maintained off site.

### **§ 63.1166 Implementation and enforcement.**

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a State, local, or Tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or Tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or Tribal agency.

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (8) of this section.

(1) Approval of alternatives to the requirements in §§63.1155, 63.1157 through 63.1159, and 63.1160(a).

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f), as defined in §63.90, and as required in this subpart.

(3) Approval of any alternative measurement methods for HCl and CL<sub>2</sub> to those specified in §63.1161(d)(1).

(4) Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.

(5) Approval of any alternative monitoring requirements to those specified in §§63.1162(a)(2) through (5) and 63.1162(b)(1) through (3).

(6) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

(7) Waiver of recordkeeping requirements specified in §63.1165.

(8) Approval of an alternative schedule for conducting performance tests to the requirement specified in §63.1162(a)(1).

[68 FR 37356, June 23, 2003]

**§§ 63.1167-63.1174 [Reserved]**

**Table 1 to Subpart CCC of Part 63—Applicability of General Provisions (40 CFR Part 63, Subpart A) to Subpart CCC**

| Reference         | Applies to Subpart CCC | Explanation   |
|-------------------|------------------------|---|
| 63.1–63.5         | Yes.                   |   |
| 63.6 (a)–(g)      | Yes.                   |   |
| 63.6 (h)          | No                     | Subpart CCC does not contain an opacity or visible emission standard. |
| 63.6 (i)–(j)      | Yes.                   |   |
| 63.7–63.9         | Yes.                   |   |
| 63.10 (a)–(c)     | Yes.                   |   |
| 63.10 (d) (1)–(2) | Yes.                   |   |

| <b>Reference</b>  | <b>Applies to Subpart CCC</b> | <b>Explanation</b>  |
|-------------------|-------------------------------|---|
| 63.10 (d)(3)      | No                            | Subpart CCC does not contain an opacity or visible emission standard. |
| 63.10 (d) (4)–(5) | Yes.                          |   |
| 63.10 (e)–(f)     | Yes.                          |   |
| 63.11             | No                            | Subpart CCC does not require the use of flares.                       |
| 63.12–63.15       | Yes                           |   |

**Attachment B**  
**to Part 70 Operating Permit Renewal No. T089-27328-00300**

U.S. Steel - East Chicago Tin Products  
101 E 129th St, East Chicago, IN 46312

**40 CFR 60, Subpart Db—Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units**

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

**§ 60.40b Applicability and delegation of authority.**

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

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

(1) Coal-fired affected facilities having a heat input capacity between 29 and 73 MW (100 and 250 MMBtu/hr), inclusive, are subject to the particulate matter (PM) and nitrogen oxides (NO<sub>x</sub>) standards under this subpart.

(2) Coal-fired affected facilities having a heat input capacity greater than 73 MW (250 MMBtu/hr) and meeting the applicability requirements under subpart D (Standards of performance for fossil-fuel-fired steam generators; §60.40) are subject to the PM and NO<sub>x</sub> standards under this subpart and to the sulfur dioxide (SO<sub>2</sub>) standards under subpart D (§60.43).

(3) Oil-fired affected facilities having a heat input capacity between 29 and 73 MW (100 and 250 MMBtu/hr), inclusive, are subject to the NO<sub>x</sub> standards under this subpart.

(4) Oil-fired affected facilities having a heat input capacity greater than 73 MW (250 MMBtu/hr) and meeting the applicability requirements under subpart D (Standards of performance for fossil-fuel-fired steam generators; §60.40) are also subject to the NO<sub>x</sub> standards under this subpart and the PM and SO<sub>2</sub> standards under subpart D (§60.42 and §60.43).

(c) Affected facilities that also meet the applicability requirements under subpart J (Standards of performance for petroleum refineries; §60.104) are subject to the PM and NO<sub>x</sub> standards under this subpart and the SO<sub>2</sub> standards under subpart J (§60.104).

(d) Affected facilities that also meet the applicability requirements under subpart E (Standards of performance for incinerators; §60.50) are subject to the NO<sub>x</sub> and PM standards under this subpart.

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

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

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

(1) Section 60.44b(f).

(2) Section 60.44b(g).

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

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

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

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

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

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

#### **§ 60.41b Definitions.**

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

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

*Byproduct/waste* means any liquid or gaseous substance produced at chemical manufacturing plants, petroleum refineries, or pulp and paper mills (except natural gas, distillate oil, or residual oil) and combusted in a steam generating unit for heat recovery or for disposal. Gaseous substances with carbon dioxide (CO<sub>2</sub>) levels greater than 50 percent or carbon monoxide levels greater than 10 percent are not byproduct/waste for the purpose of this subpart.

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

*Coal* means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels, including but not limited to solvent refined coal, gasified

coal not meeting the definition of natural gas, coal-oil mixtures, coke oven gas, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

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

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

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

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

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

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

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

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

*Emerging technology* means any SO<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 facility has applied to the Administrator and received approval to operate as an emerging technology under §60.49b(a)(4).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

*Natural gas* means:

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

between 34 and 43 megajoules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot).

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

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

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

*Potential sulfur dioxide emission rate* means the theoretical SO<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. For gasified coal or oil that is desulfurized prior to combustion, the *Potential sulfur dioxide emission rate* is the theoretical SO<sub>2</sub>emissions (ng/J or lb/MMBtu heat input) that would result from combusting fuel in a cleaned state without using any post combustion emission control systems.

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

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

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

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

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

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

*Very low sulfur oil* means for units constructed, reconstructed, or modified on or before February 28, 2005, oil that contains no more than 0.5 weight percent sulfur or that, when combusted without SO<sub>2</sub>emission control, has a SO<sub>2</sub>emission rate equal to or less than 215 ng/J (0.5 lb/MMBtu) heat input. For units constructed, reconstructed, or modified after February 28, 2005 and not located in a noncontinental area, *very low sulfur oil* means oil that contains no more than 0.30 weight percent sulfur or that, when combusted without SO<sub>2</sub>emission control, has a SO<sub>2</sub>emission rate equal to or less than 140

ng/J (0.32 lb/MMBtu) heat input. For units constructed, reconstructed, or modified after February 28, 2005 and located in a noncontinental area, *very low sulfur oil* means oil that contains no more than 0.5 weight percent sulfur or that, when combusted without SO<sub>2</sub> emission control, has a SO<sub>2</sub> emission rate equal to or less than 215 ng/J (0.50 lb/MMBtu) heat input.

*Wet flue gas desulfurization technology* means a SO<sub>2</sub> control system that is located downstream of the steam generating unit and removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gas with an alkaline slurry or solution and forming a liquid material. This definition applies to devices where the aqueous liquid material product of this contact is subsequently converted to other forms. Alkaline reagents used in wet flue gas desulfurization technology include, but are not limited to, lime, limestone, and sodium.

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

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

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

(a) Except as provided in paragraphs (b), (c), (d), or (j) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal or oil shall cause to be discharged into the atmosphere any gases that contain SO<sub>2</sub> in excess of 87 ng/J (0.20 lb/MMBtu) or 10 percent (0.10) of the potential SO<sub>2</sub> emission rate (90 percent reduction) and the emission limit determined according to the following formula:

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

Where:

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

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

K<sub>b</sub> = 340 ng/J (or 0.80 lb/MMBtu);

H<sub>a</sub> = Heat input from the combustion of coal, in J (MMBtu); and

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

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

(b) On and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal refuse alone in a fluidized bed combustion steam generating unit shall cause to be discharged into the atmosphere any gases that contain SO<sub>2</sub> in excess of 87 ng/J (0.20 lb/MMBtu) or 20 percent (0.20) of the potential SO<sub>2</sub> emission rate (80 percent reduction) and 520 ng/J (1.2 lb/MMBtu) heat input. If coal or oil is fired with coal refuse, the affected facility is subject to paragraph (a) or (d) of this section, as applicable. For facilities complying with the percent reduction standard, only the heat input supplied to the affected facility from the combustion of coal and oil is counted in this paragraph. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels or heat derived from exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

(c) On and after the date on which the performance test is completed or is required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that combusts coal or oil, either alone or in combination with any other fuel, and that uses an emerging technology for the control of SO<sub>2</sub> emissions, shall cause to be discharged into the atmosphere any gases that contain SO<sub>2</sub> in excess of 50 percent of the potential SO<sub>2</sub> emission rate (50 percent reduction) and that contain SO<sub>2</sub> in excess of the emission limit determined according to the following formula:

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

Where:

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

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

K<sub>d</sub> = 170 ng/J (or 0.40 lb/MMBtu);

H<sub>c</sub> = Heat input from the combustion of coal, in J (MMBtu); and

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

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

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

- (1) Affected facilities that have an annual capacity factor for coal and oil of 30 percent (0.30) or less and are subject to a federally enforceable permit limiting the operation of the affected facility to an annual capacity factor for coal and oil of 30 percent (0.30) or less;
  - (2) Affected facilities located in a noncontinental area; or
  - (3) Affected facilities combusting coal or oil, alone or in combination with any fuel, in a duct burner as part of a combined cycle system where 30 percent (0.30) or less of the heat entering the steam generating unit is from combustion of coal and oil in the duct burner and 70 percent (0.70) or more of the heat entering the steam generating unit is from the exhaust gases entering the duct burner; or
  - (4) The affected facility burns coke oven gas alone or in combination with natural gas or very low sulfur distillate oil.
- (e) Except as provided in paragraph (f) of this section, compliance with the emission limits, fuel oil sulfur limits, and/or percent reduction requirements under this section are determined on a 30-day rolling average basis.
- (f) Except as provided in paragraph (j)(2) of this section, compliance with the emission limits or fuel oil sulfur limits under this section is determined on a 24-hour average basis for affected facilities that (1) have a federally enforceable permit limiting the annual capacity factor for oil to 10 percent or less, (2) combust only very low sulfur oil, and (3) do not combust any other fuel.
- (g) Except as provided in paragraph (i) of this section and §60.45b(a), the SO<sub>2</sub> emission limits and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.
- (h) Reductions in the potential SO<sub>2</sub> emission rate through fuel pretreatment are not credited toward the percent reduction requirement under paragraph (c) of this section unless:
- (1) Fuel pretreatment results in a 50 percent or greater reduction in potential SO<sub>2</sub> emissions and
  - (2) Emissions from the pretreated fuel (without combustion or post-combustion SO<sub>2</sub> control) are equal to or less than the emission limits specified in paragraph (c) of this section.
- (i) An affected facility subject to paragraph (a), (b), or (c) of this section may combust very low sulfur oil or natural gas when the SO<sub>2</sub> control system is not being operated because of malfunction or maintenance of the SO<sub>2</sub> control system.
- (j) Percent reduction requirements are not applicable to affected facilities combusting only very low sulfur oil. The owner or operator of an affected facility combusting very low sulfur oil shall demonstrate that the oil meets the definition of very low sulfur oil by: (1) Following the performance testing procedures as described in §60.45b(c) or §60.45b(d), and following the monitoring procedures as described in §60.47b(a) or §60.47b(b) to determine SO<sub>2</sub> emission rate or fuel oil sulfur content; or (2) maintaining fuel records as described in §60.49b(r).
- (k)(1) Except as provided in paragraphs (k)(2), (k)(3), and (k)(4) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, natural gas, a mixture of these fuels, or a mixture of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that contain SO<sub>2</sub> in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 8 percent (0.08) of the potential SO<sub>2</sub> emission rate (92 percent reduction) and 520 ng/J (1.2 lb/MMBtu) heat input. For facilities complying

with the percent reduction standard and paragraph (k)(3) of this section, only the heat input supplied to the affected facility from the combustion of coal and oil is counted in paragraph (k) of this section. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels or heat derived from exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

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

(3) Units that are located in a noncontinental area and that combust coal, oil, or natural gas shall not discharge any gases that contain SO<sub>2</sub>in excess of 520 ng/J (1.2 lb/MMBtu) heat input if the affected facility combusts coal, or 215 ng/J (0.50 lb/MMBtu) heat input if the affected facility combusts oil or natural gas.

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

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

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

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

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

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

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

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

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

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

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

(4) An affected facility burning coke oven gas alone or in combination with other fuels not subject to a PM standard under §60.43b and not using a post-combustion technology (except a wet scrubber) for reducing PM or SO<sub>2</sub>emissions is not subject to the PM limits under §60.43b(a).

(b) On and after the date on which the performance test is completed or required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that commenced construction,

reconstruction, or modification on or before February 28, 2005, and that combusts oil (or mixtures of oil with other fuels) and uses a conventional or emerging technology to reduce SO<sub>2</sub> emissions shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(e) For the purposes of this section, the annual capacity factor is determined by dividing the actual heat input to the steam generating unit during the calendar year from the combustion of coal, wood, or

municipal-type solid waste, and other fuels, as applicable, by the potential heat input to the steam generating unit if the steam generating unit had been operated for 8,760 hours at the maximum heat input capacity.

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

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

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

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

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

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

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

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

(5) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, an owner or operator of an affected facility not located in a

noncontinental area that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.30 weight percent sulfur, coke oven gas, a mixture of these fuels, or either fuel (or a mixture of these fuels) in combination with other fuels not subject to a PM standard in §60.43b and not using a post-combustion technology (except a wet scrubber) to reduce SO<sub>2</sub> or PM emissions is not subject to the PM limits in (h)(1) of this section.

(6) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, an owner or operator of an affected facility located in a noncontinental area that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.5 weight percent sulfur, coke oven gas, a mixture of these fuels, or either fuel (or a mixture of these fuels) in combination with other fuels not subject to a PM standard in §60.43b and not using a post-combustion technology (except a wet scrubber) to reduce SO<sub>2</sub> or PM emissions is not subject to the PM limits in (h)(1) of this section.

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

**§ 60.44b Standard for nitrogen oxides (NOX).**

(a) Except as provided under paragraphs (k) and (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that is subject to the provisions of this section and that combusts only coal, oil, or natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain NO<sub>x</sub> (expressed as NO<sub>2</sub>) in excess of the following emission limits:

| Fuel/steam generating unit type   | Nitrogen oxide emission limits<br>(expressed as NO <sub>2</sub> ) heat input |          |
|---|--|----------|
|   | ng/J   | lb/MMBTu |
| (1) Natural gas and distillate oil, except (4):   |  |          |
| (i) Low heat release rate   | 43   | 0.10     |
| (ii) High heat release rate   | 86   | 0.20     |
| (2) Residual oil:   |  |          |
| (i) Low heat release rate   | 130  | 0.30     |
| (ii) High heat release rate   | 170  | 0.40     |
| (3) Coal:   |  |          |
| (i) Mass-feed stoker  | 210  | 0.50     |
| (ii) Spreader stoker and fluidized bed combustion   | 260  | 0.60     |
| (iii) Pulverized coal   | 300  | 0.70     |
| (iv) Lignite, except (v)  | 260  | 0.60     |
| (v) Lignite mined in North Dakota, South Dakota, or Montana and combusted in a slag tap furnace | 340  | 0.80     |
| (vi) Coal-derived synthetic fuels   | 210  | 0.50     |
| (4) Duct burner used in a combined cycle system:  |  |          |
| (i) Natural gas and distillate oil  | 86   | 0.20     |

| Fuel/steam generating unit type | Nitrogen oxide emission limits<br>(expressed as NO <sub>2</sub> ) heat input |          |
|---------------------------------|--|----------|
|                                 | ng/J   | lb/MMBTu |
| (ii) Residual oil               | 170  | 0.40     |

(b) Except as provided under paragraphs (k) and (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts mixtures of coal, oil, or natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain NO<sub>x</sub> in excess of a limit determined by the use of the following formula:

$$E_n = \frac{(EL_g H_g) + (EL_o H_o) + (EL_c H_c)}{(H_g + H_o + H_c)}$$

Where:

E<sub>n</sub> = NO<sub>x</sub> emission limit (expressed as NO<sub>2</sub>), ng/J (lb/MMBTu);

EL<sub>g</sub> = Appropriate emission limit from paragraph (a)(1) for combustion of natural gas or distillate oil, ng/J (lb/MMBTu);

H<sub>g</sub> = Heat input from combustion of natural gas or distillate oil, J (MMBTu);

EL<sub>o</sub> = Appropriate emission limit from paragraph (a)(2) for combustion of residual oil, ng/J (lb/MMBTu);

H<sub>o</sub> = Heat input from combustion of residual oil, J (MMBTu);

EL<sub>c</sub> = Appropriate emission limit from paragraph (a)(3) for combustion of coal, ng/J (lb/MMBTu); and

H<sub>c</sub> = Heat input from combustion of coal, J (MMBTu).

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

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

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

$$E_n = \frac{(EL_g H_g) + (EL_o H_o) + (EL_c H_c)}{(H_g + H_o + H_c)}$$

Where:

E<sub>n</sub> = NO<sub>x</sub> emission limit (expressed as NO<sub>2</sub>), ng/J (lb/MMBtu);

EL<sub>g<sub>o</sub></sub> = Appropriate emission limit from paragraph (a)(1) for combustion of natural gas or distillate oil, ng/J (lb/MMBtu);

H<sub>g<sub>o</sub></sub> = Heat input from combustion of natural gas, distillate oil and gaseous byproduct/waste, J (MMBtu);

EL<sub>r<sub>o</sub></sub> = Appropriate emission limit from paragraph (a)(2) for combustion of residual oil and/or byproduct/waste, ng/J (lb/MMBtu);

H<sub>r<sub>o</sub></sub> = Heat input from combustion of residual oil, J (MMBtu);

EL<sub>c</sub> = Appropriate emission limit from paragraph (a)(3) for combustion of coal, ng/J (lb/MMBtu); and

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

(f) Any owner or operator of an affected facility that combusts byproduct/waste with either natural gas or oil may petition the Administrator within 180 days of the initial startup of the affected facility to establish a NO<sub>x</sub> emission limit that shall apply specifically to that affected facility when the byproduct/waste is combusted. The petition shall include sufficient and appropriate data, as determined by the Administrator, such as NO<sub>x</sub> emissions from the affected facility, waste composition (including nitrogen content), and combustion conditions to allow the Administrator to confirm that the affected facility is unable to comply with the emission limits in paragraph (e) of this section and to determine the appropriate emission limit for the affected facility.

(1) Any owner or operator of an affected facility petitioning for a facility-specific NO<sub>x</sub> emission limit under this section shall:

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

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

(2) The NO<sub>x</sub> emission limits for natural gas or distillate oil in paragraph (a)(1) of this section or for residual oil in paragraph (a)(2) or (l)(1) of this section, as appropriate, shall be applicable to the affected facility until and unless the petition is approved by the Administrator. If the petition is approved by the Administrator, a facility-specific NO<sub>x</sub> emission limit will be established at the NO<sub>x</sub> emission level achievable when the affected facility is combusting oil or natural gas and byproduct/waste in a manner that the Administrator determines to be consistent with minimizing NO<sub>x</sub> emissions. In lieu of amending this subpart, a letter will be sent to the facility describing the facility-specific NO<sub>x</sub> limit. The facility shall use the compliance procedures detailed in the letter and make the letter available to the public. If the Administrator determines it is appropriate, the conditions and requirements of the letter can be reviewed and changed at any point.

(g) Any owner or operator of an affected facility that combusts hazardous waste (as defined by 40 CFR part 261 or 40 CFR part 761) with natural gas or oil may petition the Administrator within 180 days of the initial startup of the affected facility for a waiver from compliance with the NO<sub>x</sub> emission limit that applies specifically to that affected facility. The petition must include sufficient and appropriate data, as determined by the Administrator, on NO<sub>x</sub> emissions from the affected facility, waste destruction efficiencies, waste composition (including nitrogen content), the quantity of specific wastes to be combusted and combustion conditions to allow the Administrator to determine if the affected facility is able to comply with the NO<sub>x</sub> emission limits required by this section. The owner or operator of the affected facility shall demonstrate that when hazardous waste is combusted in the affected facility, thermal destruction efficiency requirements for hazardous waste specified in an applicable federally enforceable requirement preclude compliance with the NO<sub>x</sub> emission limits of this section. The NO<sub>x</sub> emission limits for natural gas or distillate oil in paragraph (a)(1) of this section or for residual oil in paragraph (a)(2) or (l)(1) of this section, as appropriate, are applicable to the affected facility until and unless the petition is approved by the Administrator. (See 40 CFR 761.70 for regulations applicable to the incineration of materials containing polychlorinated biphenyls (PCB's).) In lieu of amending this subpart, a letter will be sent to the facility describing the facility-specific NO<sub>x</sub> limit. The facility shall use the compliance procedures detailed in the letter and make the letter available to the public. If the Administrator determines it is appropriate, the conditions and requirements of the letter can be reviewed and changed at any point.

(h) For purposes of paragraph (i) of this section, the NO<sub>x</sub> standards under this section apply at all times including periods of startup, shutdown, or malfunction.

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

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

(1) Combust, alone or in combination, only natural gas, distillate oil, or residual oil with a nitrogen content of 0.30 weight percent or less;

(2) Have a combined annual capacity factor of 10 percent or less for natural gas, distillate oil, and residual oil with a nitrogen content of 0.30 weight percent or less; and

(3) Are subject to a federally enforceable requirement limiting operation of the affected facility to the firing of natural gas, distillate oil, and/or residual oil with a nitrogen content of 0.30 weight percent or less and limiting operation of the affected facility to a combined annual capacity factor of 10 percent or less for natural gas, distillate oil, and residual oil with a nitrogen content of 0.30 weight percent or less.

(k) Affected facilities that meet the criteria described in paragraphs (j)(1), (2), and (3) of this section, and that have a heat input capacity of 73 MW (250 MMBtu/hr) or less, are not subject to the NO<sub>x</sub> emission limits under this section.

(l) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction or reconstruction after July 9, 1997 shall cause to be discharged into the atmosphere from that affected facility any gases that contain NO<sub>x</sub>(expressed as NO<sub>2</sub>) in excess of the following limits:

(1) If the affected facility combusts coal, oil, natural gas, a mixture of these fuels, or a mixture of these fuels with any other fuels: A limit of 86 ng/J (0.20 lb/MMBtu) heat input unless the affected facility has an annual capacity factor for coal, oil, and natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, and natural gas; or

(2) If the affected facility has a low heat release rate and combusts natural gas or distillate oil in excess of 30 percent of the heat input on a 30-day rolling average from the combustion of all fuels, a limit determined by use of the following formula:

$$E_n = \frac{(0.10 \times H_{go}) + (0.20 \times H_r)}{(H_{go} + H_r)}$$

Where:

E<sub>n</sub>= NO<sub>x</sub>emission limit, (lb/MMBtu);

H<sub>go</sub>= 30-day heat input from combustion of natural gas or distillate oil; and

H<sub>r</sub>= 30-day heat input from combustion of any other fuel.

(3) After February 27, 2006, units where more than 10 percent of total annual output is electrical or mechanical may comply with an optional limit of 270 ng/J (2.1 lb/MWh) gross energy output, based on a 30-day rolling average. Units complying with this output-based limit must demonstrate compliance according to the procedures of §60.48Da(i) of subpart Da of this part, and must monitor emissions according to §60.49Da(c), (k), through (n) of subpart Da of this part.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5086, Jan. 28, 2009]

#### **§ 60.45b Compliance and performance test methods and procedures for sulfur dioxide.**

(a) The SO<sub>2</sub>emission standards in §60.42b apply at all times. Facilities burning coke oven gas alone or in combination with any other gaseous fuels or distillate oil are allowed to exceed the limit 30 operating days per calendar year for SO<sub>2</sub>control system maintenance.

(b) In conducting the performance tests required under §60.8, the owner or operator shall use the methods and procedures in appendix A (including fuel certification and sampling) of this part or the methods and procedures as specified in this section, except as provided in §60.8(b). Section 60.8(f) does not apply to this section. The 30-day notice required in §60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator.

(c) The owner or operator of an affected facility shall conduct performance tests to determine compliance with the percent of potential SO<sub>2</sub>emission rate (% P<sub>s</sub>) and the SO<sub>2</sub>emission rate (E<sub>s</sub>) pursuant to §60.42b following the procedures listed below, except as provided under paragraph (d) and (k) of this section.

(1) The initial performance test shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the SO<sub>2</sub> standards shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility.

(2) If only coal, only oil, or a mixture of coal and oil is combusted, the following procedures are used:

(i) The procedures in Method 19 of appendix A-7 of this part are used to determine the hourly SO<sub>2</sub> emission rate (E<sub>ho</sub>) and the 30-day average emission rate (E<sub>ao</sub>). The hourly averages used to compute the 30-day averages are obtained from the CEMS of §60.47b(a) or (b).

(ii) The percent of potential SO<sub>2</sub> emission rate (%P<sub>s</sub>) emitted to the atmosphere is computed using the following formula:

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

Where:

%P<sub>s</sub> = Potential SO<sub>2</sub> emission rate, percent;

%R<sub>g</sub> = SO<sub>2</sub> removal efficiency of the control device as determined by Method 19 of appendix A of this part, in percent; and

%R<sub>f</sub> = SO<sub>2</sub> removal efficiency of fuel pretreatment as determined by Method 19 of appendix A of this part, in percent.

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

(i) An adjusted hourly SO<sub>2</sub> emission rate (E<sub>ho</sub><sup>o</sup>) is used in Equation 19-19 of Method 19 of appendix A of this part to compute an adjusted 30-day average emission rate (E<sub>ao</sub><sup>o</sup>). The E<sub>ho</sub><sup>o</sup> is computed using the following formula:

$$E_{ho}^o = \frac{E_w - E_w(1 - X_k)}{X_k}$$

Where:

E<sub>ho</sub><sup>o</sup> = Adjusted hourly SO<sub>2</sub> emission rate, 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 the fuel sampling and analysis procedures in Method 19 of appendix A of this part, ng/J (lb/MMBtu). The value E<sub>w</sub> for each fuel lot is used for each hourly average during the time that the lot is being combusted; and

X<sub>k</sub> = Fraction of total heat input from fuel combustion derived from coal, oil, or coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(ii) To compute the percent of potential SO<sub>2</sub> emission rate (%P<sub>s</sub>), an adjusted %R<sub>g</sub> (%R<sub>g</sub><sup>o</sup>) is computed from the adjusted E<sub>ao</sub><sup>o</sup> from paragraph (b)(3)(i) of this section and an adjusted average SO<sub>2</sub> inlet rate (E<sub>ai</sub><sup>o</sup>) using the following formula:

$$\%R_g^o = 100 \left( 1.0 - \frac{E_{ao}^o}{E_{ai}^o} \right)$$

To compute E<sub>ai</sub><sup>o</sup>, an adjusted hourly SO<sub>2</sub> inlet rate (E<sub>hi</sub><sup>o</sup>) is used. The E<sub>hi</sub><sup>o</sup> is computed using the following formula:

$$E_{hi}^o = \frac{E_{hi} - E_w(1 - X_k)}{X_k}$$

Where:

E<sub>hi</sub><sup>o</sup> = Adjusted hourly SO<sub>2</sub> inlet rate, ng/J (lb/MMBtu); and

E<sub>hi</sub> = Hourly SO<sub>2</sub> inlet rate, ng/J (lb/MMBtu).

(4) The owner or operator of an affected facility subject to paragraph (c)(3) of this section does not have to measure parameters E<sub>w</sub> or X<sub>k</sub> if the owner or operator elects to assume that X<sub>k</sub> = 1.0. Owners or operators of affected facilities who assume X<sub>k</sub> = 1.0 shall:

(i) Determine %P<sub>s</sub> following the procedures in paragraph (c)(2) of this section; and

(ii) Sulfur dioxide emissions (E<sub>s</sub>) are considered to be in compliance with SO<sub>2</sub> emission limits under §60.42b.

(5) The owner or operator of an affected facility that qualifies under the provisions of §60.42b(d) does not have to measure parameters E<sub>w</sub> or X<sub>k</sub> in paragraph (c)(3) of this section if the owner or operator of the affected facility elects to measure SO<sub>2</sub> emission rates of the coal or oil following the fuel sampling and analysis procedures in Method 19 of appendix A-7 of this part.

(d) Except as provided in paragraph (j) of this section, the owner or operator of an affected facility that combusts only very low sulfur oil, natural gas, or a mixture of these fuels, has an annual capacity factor for oil of 10 percent (0.10) or less, and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for oil of 10 percent (0.10) or less shall:

(1) Conduct the initial performance test over 24 consecutive steam generating unit operating hours at full load;

(2) Determine compliance with the standards after the initial performance test based on the arithmetic average of the hourly emissions data during each steam generating unit operating day if a CEMS is used, or based on a daily average if Method 6B of appendix A of this part or fuel sampling and analysis procedures under Method 19 of appendix A of this part are used.

(e) The owner or operator of an affected facility subject to §60.42b(d)(1) shall demonstrate the maximum design capacity of the steam generating unit by operating the facility at maximum capacity for 24 hours. This demonstration will be made during the initial performance test and a subsequent demonstration may be requested at any other time. If the 24-hour average firing rate for the affected facility is less than the maximum design capacity provided by the manufacturer of the affected facility, the 24-hour average firing

rate shall be used to determine the capacity utilization rate for the affected facility, otherwise the maximum design capacity provided by the manufacturer is used.

(f) For the initial performance test required under §60.8, compliance with the SO<sub>2</sub> emission limits and percent reduction requirements under §60.42b is based on the average emission rates and the average percent reduction for SO<sub>2</sub> for the first 30 consecutive steam generating unit operating days, except as provided under paragraph (d) of this section. The initial performance test is the only test for which at least 30 days prior notice is required unless otherwise specified by the Administrator. The initial performance test is to be scheduled so that the first steam generating unit operating day of the 30 successive steam generating unit operating days is completed within 30 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility. The boiler load during the 30-day period does not have to be the maximum design load, but must be representative of future operating conditions and include at least one 24-hour period at full load.

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

(h) Except as provided under paragraph (i) of this section, the owner or operator of an affected facility shall use all valid SO<sub>2</sub> emissions data in calculating %P<sub>s</sub> and E<sub>ho</sub> under paragraph (c), of this section whether or not the minimum emissions data requirements under §60.46b are achieved. All valid emissions data, including valid SO<sub>2</sub> emission data collected during periods of startup, shutdown and malfunction, shall be used in calculating %P<sub>s</sub> and E<sub>ho</sub> pursuant to paragraph (c) of this section.

(i) During periods of malfunction or maintenance of the SO<sub>2</sub> control systems when oil is combusted as provided under §60.42b(i), emission data are not used to calculate %P<sub>s</sub> or E<sub>s</sub> under §60.42b(a), (b) or (c), however, the emissions data are used to determine compliance with the emission limit under §60.42b(i).

(j) The owner or operator of an affected facility that only combusts very low sulfur oil, natural gas, or a mixture of these fuels with any other fuels not subject to an SO<sub>2</sub> standard is not subject to the compliance and performance testing requirements of this section if the owner or operator obtains fuel receipts as described in §60.49b(r).

(k) The owner or operator of an affected facility seeking to demonstrate compliance in §§60.42b(d)(4), 60.42b(j), 60.42b(k)(2), and 60.42b(k)(3) (when not burning coal) shall follow the applicable procedures in §60.49b(r).

[72 FR 32742, June 13, 2007, as amended at 74 FR 5086, Jan. 28, 2009]

**§ 60.46b Compliance and performance test methods and procedures for particulate matter and nitrogen oxides.**

(a) The PM emission standards and opacity limits under §60.43b apply at all times except during periods of startup, shutdown, or malfunction. The NO<sub>x</sub> emission standards under §60.44b apply at all times.

(b) Compliance with the PM emission standards under §60.43b shall be determined through performance testing as described in paragraph (d) of this section, except as provided in paragraph (i) of this section.

(c) Compliance with the NO<sub>x</sub> emission standards under §60.44b shall be determined through performance testing under paragraph (e) or (f), or under paragraphs (g) and (h) of this section, as applicable.

(d) To determine compliance with the PM emission limits and opacity limits under §60.43b, the owner or operator of an affected facility shall conduct an initial performance test as required under §60.8, and shall conduct subsequent performance tests as requested by the Administrator, using the following procedures and reference methods:

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

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

(i) Method 5 of appendix A of this part shall be used at affected facilities without wet flue gas desulfurization (FGD) systems; and

(ii) Method 17 of appendix A–6 of this part may be used at facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of sections 8.1 and 11.1 of Method 5B of appendix A–3 of this part may be used in Method 17 of appendix A–6 of this part only if it is used after a wet FGD system. Do not use Method 17 of appendix A–6 of this part after wet FGD systems if the effluent is saturated or laden with water droplets.

(iii) Method 5B of appendix A of this part is to be used only after wet FGD systems.

(3) Method 1 of appendix A of this part is used to select the sampling site and the number of traverse sampling points. The sampling time for each run is at least 120 minutes and the minimum sampling volume is 1.7 dscm (60 dscf) except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.

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

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

(6) For each run using Method 5, 5B, or 17 of appendix A of this part, the emission rate expressed in ng/J heat input is determined using:

(i) The O<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.

(7) Method 9 of appendix A of this part is used for determining the opacity of stack emissions.

(e) To determine compliance with the emission limits for NO<sub>x</sub> required under §60.44b, the owner or operator of an affected facility shall conduct the performance test as required under §60.8 using the continuous system for monitoring NO<sub>x</sub> under §60.48(b).

(1) For the initial compliance test, NO<sub>x</sub> from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the NO<sub>x</sub> emission standards under §60.44b. The 30-day average emission rate is

calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period.

(2) Following the date on which the initial performance test is completed or is required to be completed in §60.8, whichever date comes first, the owner or operator of an affected facility which combusts coal (except as specified under §60.46b(e)(4)) or which combusts residual oil having a nitrogen content greater than 0.30 weight percent shall determine compliance with the NO<sub>x</sub>emission standards in §60.44b on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated for each steam generating unit operating day as the average of all of the hourly NO<sub>x</sub>emission data for the preceding 30 steam generating unit operating days.

(3) Following the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that has a heat input capacity greater than 73 MW (250 MMBtu/hr) and that combusts natural gas, distillate oil, or residual oil having a nitrogen content of 0.30 weight percent or less shall determine compliance with the NO<sub>x</sub>standards under §60.44b on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NO<sub>x</sub>emission data for the preceding 30 steam generating unit operating days.

(4) Following the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that has a heat input capacity of 73 MW (250 MMBtu/hr) or less and that combusts natural gas, distillate oil, gasified coal, or residual oil having a nitrogen content of 0.30 weight percent or less shall upon request determine compliance with the NO<sub>x</sub>standards in §60.44b through the use of a 30-day performance test. During periods when performance tests are not requested, NO<sub>x</sub>emissions data collected pursuant to §60.48b(g)(1) or §60.48b(g)(2) are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the NO<sub>x</sub>emission standards. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NO<sub>x</sub>emission data for the preceding 30 steam generating unit operating days.

(5) If the owner or operator of an affected facility that combusts residual oil does not sample and analyze the residual oil for nitrogen content, as specified in §60.49b(e), the requirements of §60.48b(g)(1) apply and the provisions of §60.48b(g)(2) are inapplicable.

(f) To determine compliance with the emissions limits for NO<sub>x</sub>required by §60.44b(a)(4) or §60.44b(l) for duct burners used in combined cycle systems, either of the procedures described in paragraph (f)(1) or (2) of this section may be used:

(1) The owner or operator of an affected facility shall conduct the performance test required under §60.8 as follows:

(i) The emissions rate (E) of NO<sub>x</sub>shall be computed using Equation 1 in this section:

$$E = E_{\xi} + \left( \frac{H_{\xi}}{H_b} \right) (E_{\xi} - E_{\xi}) \quad (\text{Eq.1})$$

Where:

E = Emissions rate of NO<sub>x</sub>from the duct burner, ng/J (lb/MMBtu) heat input;

$E_{sg}$  = Combined effluent emissions rate, in ng/J (lb/MMBtu) heat input using appropriate F factor as described in Method 19 of appendix A of this part;

$H_g$  = Heat input rate to the combustion turbine, in J/hr (MMBtu/hr);

$H_b$  = Heat input rate to the duct burner, in J/hr (MMBtu/hr); and

$E_g$  = Emissions rate from the combustion turbine, in ng/J (lb/MMBtu) heat input calculated using appropriate F factor as described in Method 19 of appendix A of this part.

(ii) Method 7E of appendix A of this part shall be used to determine the  $NO_x$  concentrations. Method 3A or 3B of appendix A of this part shall be used to determine  $O_2$  concentration.

(iii) The owner or operator shall identify and demonstrate to the Administrator's satisfaction suitable methods to determine the average hourly heat input rate to the combustion turbine and the average hourly heat input rate to the affected duct burner.

(iv) Compliance with the emissions limits under §60.44b(a)(4) or §60.44b(l) is determined by the three-run average (nominal 1-hour runs) for the initial and subsequent performance tests; or

(2) The owner or operator of an affected facility may elect to determine compliance on a 30-day rolling average basis by using the CEMS specified under §60.48b for measuring  $NO_x$  and  $O_2$  and meet the requirements of §60.48b. The sampling site shall be located at the outlet from the steam generating unit. The  $NO_x$  emissions rate at the outlet from the steam generating unit shall constitute the  $NO_x$  emissions rate from the duct burner of the combined cycle system.

(g) The owner or operator of an affected facility described in §60.44b(j) or §60.44b(k) shall demonstrate the maximum heat input capacity of the steam generating unit by operating the facility at maximum capacity for 24 hours. The owner or operator of an affected facility shall determine the maximum heat input capacity using the heat loss method or the heat input method described in sections 5 and 7.3 of the ASME *Power Test Codes* 4.1 (incorporated by reference, see §60.17). This demonstration of maximum heat input capacity shall be made during the initial performance test for affected facilities that meet the criteria of §60.44b(j). It shall be made within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start-up of each facility, for affected facilities meeting the criteria of §60.44b(k). Subsequent demonstrations may be required by the Administrator at any other time. If this demonstration indicates that the maximum heat input capacity of the affected facility is less than that stated by the manufacturer of the affected facility, the maximum heat input capacity determined during this demonstration shall be used to determine the capacity utilization rate for the affected facility. Otherwise, the maximum heat input capacity provided by the manufacturer is used.

(h) The owner or operator of an affected facility described in §60.44b(j) that has a heat input capacity greater than 73 MW (250 MMBtu/hr) shall:

(1) Conduct an initial performance test as required under §60.8 over a minimum of 24 consecutive steam generating unit operating hours at maximum heat input capacity to demonstrate compliance with the  $NO_x$  emission standards under §60.44b using Method 7, 7A, 7E of appendix A of this part, or other approved reference methods; and

(2) Conduct subsequent performance tests once per calendar year or every 400 hours of operation (whichever comes first) to demonstrate compliance with the  $NO_x$  emission standards under §60.44b over a minimum of 3 consecutive steam generating unit operating hours at maximum heat input capacity using Method 7, 7A, 7E of appendix A of this part, or other approved reference methods.

- (i) The owner or operator of an affected facility seeking to demonstrate compliance with the PM limit in paragraphs §60.43b(a)(4) or §60.43b(h)(5) shall follow the applicable procedures in §60.49b(r).
- (j) In place of PM testing with Method 5 or 5B of appendix A–3 of this part, or Method 17 of appendix A–6 of this part, an owner or operator may elect to install, calibrate, maintain, and operate a CEMS for monitoring PM emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who elects to continuously monitor PM emissions instead of conducting performance testing using Method 5 or 5B of appendix A–3 of this part or Method 17 of appendix A–6 of this part shall comply with the requirements specified in paragraphs (j)(1) through (j)(14) of this section.
- (1) Notify the Administrator one month before starting use of the system.
- (2) Notify the Administrator one month before stopping use of the system.
- (3) The monitor shall be installed, evaluated, and operated in accordance with §60.13 of subpart A of this part.
- (4) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under §60.8 of subpart A of this part or within 180 days of notification to the Administrator of use of the CEMS if the owner or operator was previously determining compliance by Method 5, 5B, or 17 of appendix A of this part performance tests, whichever is later.
- (5) The owner or operator of an affected facility shall conduct an initial performance test for PM emissions as required under §60.8 of subpart A of this part. Compliance with the PM emission limit shall be determined by using the CEMS specified in paragraph (j) of this section to measure PM and calculating a 24-hour block arithmetic average emission concentration using EPA Reference Method 19 of appendix A of this part, section 4.1.
- (6) Compliance with the PM emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using CEMS outlet data.
- (7) At a minimum, valid CEMS hourly averages shall be obtained as specified in paragraphs (j)(7)(i) of this section for 75 percent of the total operating hours per 30-day rolling average.
- (i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.
- (ii) [Reserved]
- (8) The 1-hour arithmetic averages required under paragraph (j)(7) of this section shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under §60.13(e)(2) of subpart A of this part.
- (9) All valid CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (j)(7) of this section are not met.
- (10) The CEMS shall be operated according to Performance Specification 11 in appendix B of this part.
- (11) During the correlation testing runs of the CEMS required by Performance Specification 11 in appendix B of this part, PM and O<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 per 30-day rolling average.

(14) After July 1, 2011, within 90 days after completing a correlation testing run, the owner or operator of an affected facility shall either successfully enter the test data into EPA's WebFIRE data base located at <http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main> or mail a copy to: United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; Mail Code: D243–01; RTP, NC 27711.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5086, Jan. 28, 2009]

#### **§ 60.47b Emission monitoring for sulfur dioxide.**

(a) Except as provided in paragraphs (b) and (f) of this section, the owner or operator of an affected facility subject to the SO<sub>2</sub> standards in §60.42b shall install, calibrate, maintain, and operate CEMS for measuring SO<sub>2</sub> concentrations and either O<sub>2</sub> or CO<sub>2</sub> concentrations and shall record the output of the systems. For units complying with the percent reduction standard, the SO<sub>2</sub> and either O<sub>2</sub> or CO<sub>2</sub> concentrations shall both be monitored at the inlet and outlet of the SO<sub>2</sub> control device. If the owner or operator has installed and certified SO<sub>2</sub> and O<sub>2</sub> or CO<sub>2</sub> CEMS according to the requirements of §75.20(c)(1) of this chapter and appendix A to part 75 of this chapter, and is continuing to meet the ongoing quality assurance requirements of §75.21 of this chapter and appendix B to part 75 of this chapter, those CEMS may be used to meet the requirements of this section, provided that:

(1) When relative accuracy testing is conducted, SO<sub>2</sub> concentration data and CO<sub>2</sub>(or O<sub>2</sub>) data are collected simultaneously; and

(2) In addition to meeting the applicable SO<sub>2</sub> and CO<sub>2</sub>(or O<sub>2</sub>) relative accuracy specifications in Figure 2 of appendix B to part 75 of this chapter, the relative accuracy (RA) standard in section 13.2 of Performance Specification 2 in appendix B to this part is met when the RA is calculated on a lb/MMBtu basis; and

(3) The reporting requirements of §60.49b are met. SO<sub>2</sub> and CO<sub>2</sub>(or O<sub>2</sub>) data used to meet the requirements of §60.49b shall not include substitute data values derived from the missing data procedures in subpart D of part 75 of this chapter, nor shall the SO<sub>2</sub> data have been bias adjusted according to the procedures of part 75 of this chapter.

(b) As an alternative to operating CEMS as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO<sub>2</sub> emissions and percent reduction by:

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

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

(3) A daily SO<sub>2</sub> emission rate, E<sub>D</sub>, shall be determined using the procedure described in Method 6A of appendix A of this part, section 7.6.2 (Equation 6A-8) and stated in ng/J (lb/MMBtu) heat input.

(4) The mean 30-day emission rate is calculated using the daily measured values in ng/J (lb/MMBtu) for 30 successive steam generating unit operating days using equation 19-20 of Method 19 of appendix A of this part.

(c) The owner or operator of an affected facility shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator or the reference methods and procedures as described in paragraph (b) of this section.

(d) The 1-hour average SO<sub>2</sub> emission rates measured by the CEMS required by paragraph (a) of this section and required under §60.13(h) is expressed in ng/J or lb/MMBtu heat input and is used to calculate the average emission rates under §60.42(b). Each 1-hour average SO<sub>2</sub> emission rate must be based on 30 or more minutes of steam generating unit operation. The hourly averages shall be calculated according to §60.13(h)(2). Hourly SO<sub>2</sub> emission rates are not calculated if the affected facility is operated less than 30 minutes in a given clock hour and are not counted toward determination of a steam generating unit operating day.

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

(1) Except as provided for in paragraph (e)(4) of this section, all CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 of appendix B of this part.

(2) Except as provided for in paragraph (e)(4) of this section, quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of appendix F of this part.

(3) For affected facilities combusting coal or oil, alone or in combination with other fuels, the span value of the SO<sub>2</sub> CEMS at the inlet to the SO<sub>2</sub> control device is 125 percent of the maximum estimated hourly potential SO<sub>2</sub> emissions of the fuel combusted, and the span value of the CEMS at the outlet to the SO<sub>2</sub> control device is 50 percent of the maximum estimated hourly potential SO<sub>2</sub> emissions of the fuel combusted. Alternatively, SO<sub>2</sub> span values determined according to section 2.1.1 in appendix A to part 75 of this chapter may be used.

(4) As an alternative to meeting the requirements of paragraphs (e)(1) and (e)(2) of this section, the owner or operator may elect to implement the following alternative data accuracy assessment procedures:

(i) For all required CO<sub>2</sub> and O<sub>2</sub> monitors and for SO<sub>2</sub> and NO<sub>x</sub> monitors with span values greater than or equal to 100 ppm, the daily calibration error test and calibration adjustment procedures described in sections 2.1.1 and 2.1.3 of appendix B to part 75 of this chapter may be followed instead of the CD assessment procedures in Procedure 1, section 4.1 of appendix F to this part.

(ii) For all required CO<sub>2</sub> and O<sub>2</sub> monitors and for SO<sub>2</sub> and NO<sub>x</sub> monitors with span values greater than 30 ppm, quarterly linearity checks may be performed in accordance with section 2.2.1 of appendix B to part 75 of this chapter, instead of performing the cylinder gas audits (CGAs) described in Procedure 1, section 5.1.2 of appendix F to this part. If this option is selected: The frequency of the linearity checks shall be as specified in section 2.2.1 of appendix B to part 75 of this chapter; the applicable linearity specifications in section 3.2 of appendix A to part 75 of this chapter shall be met; the data validation and out-of-control criteria in section 2.2.3 of appendix B to part 75 of this chapter shall be followed instead of the excessive audit inaccuracy and out-of-control criteria in Procedure 1, section 5.2 of appendix F to this part; and the grace period provisions in section 2.2.4 of appendix B to part 75 of this chapter shall apply. For the purposes of data validation under this subpart, the cylinder gas audits described in Procedure 1, section 5.1.2 of appendix F to this part shall be performed for SO<sub>2</sub> and NO<sub>x</sub> span values less than or equal to 30 ppm; and

(iii) For SO<sub>2</sub>, CO<sub>2</sub>, and O<sub>2</sub> monitoring systems and for NO<sub>x</sub> emission rate monitoring systems, RATAs may be performed in accordance with section 2.3 of appendix B to part 75 of this chapter instead of following the procedures described in Procedure 1, section 5.1.1 of appendix F to this part. If this option is selected: The frequency of each RATA shall be as specified in section 2.3.1 of appendix B to part 75 of this chapter; the applicable relative accuracy specifications shown in Figure 2 in appendix B to part 75 of this chapter shall be met; the data validation and out-of-control criteria in section 2.3.2 of appendix B to part 75 of this chapter shall be followed instead of the excessive audit inaccuracy and out-of-control criteria in Procedure 1, section 5.2 of appendix F to this part; and the grace period provisions in section 2.3.3 of appendix B to part 75 of this chapter shall apply. For the purposes of data validation under this subpart, the relative accuracy specification in section 13.2 of Performance Specification 2 in appendix B to this part shall be met on a lb/MMBtu basis for SO<sub>2</sub> (regardless of the SO<sub>2</sub> emission level during the RATA), and for NO<sub>x</sub> when the average NO<sub>x</sub> emission rate measured by the reference method during the RATA is less than 0.100 lb/MMBtu.

(f) The owner or operator of an affected facility that combusts very low sulfur oil or is demonstrating compliance under §60.45b(k) is not subject to the emission monitoring requirements under paragraph (a) of this section if the owner or operator maintains fuel records as described in §60.49b(r).

[72 FR 32742, June 13, 2007, as amended at 74 FR 5087, Jan. 28, 2009]

#### **§ 60.48b Emission monitoring for particulate matter and nitrogen oxides.**

(a) Except as provided in paragraph (j) of this section, the owner or operator of an affected facility subject to the opacity standard under §60.43b shall install, calibrate, maintain, and operate a continuous opacity monitoring systems (COMS) for measuring the opacity of emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility subject to an opacity standard under §60.43b and meeting the conditions under paragraphs (j)(1), (2), (3), (4), or (5) of this section who elects not to install a COMS shall conduct a performance test using Method 9 of appendix A-4 of this part and the procedures in §60.11 to demonstrate compliance with the applicable limit in §60.43b and shall comply with either paragraphs (a)(1), (a)(2), or (a)(3) of this section. If during the initial 60 minutes of observation all 6-minute averages are less than 10 percent and all individual 15-second

observations are less than or equal to 20 percent, the observation period may be reduced from 3 hours to 60 minutes.

(1) Except as provided in paragraph (a)(2) and (a)(3) of this section, the owner or operator shall conduct subsequent Method 9 of appendix A-4 of this part performance tests using the procedures in paragraph (a) of this section according to the applicable schedule in paragraphs (a)(1)(i) through (a)(1)(iv) of this section, as determined by the most recent Method 9 of appendix A-4 of this part performance test results.

(i) If no visible emissions are observed, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted;

(ii) If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted;

(iii) If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 3 calendar months from the date that the most recent performance test was conducted; or

(iv) If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 30 calendar days from the date that the most recent performance test was conducted.

(2) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A-4 of this part performance tests, elect to perform subsequent monitoring using Method 22 of appendix A-7 of this part according to the procedures specified in paragraphs (a)(2)(i) and (ii) of this section.

(i) The owner or operator shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel for which an opacity standard is applicable using Method 22 of appendix A-7 of this part and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period ( *i.e.* , 30 seconds per 10 minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period ( *i.e.* , 90 seconds per 30 minute period) the owner or operator shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation ( *i.e.* , 90 seconds) or conduct a new Method 9 of appendix A-4 of this part performance test using the procedures in paragraph (a) of this section within 30 calendar days according to the requirements in §60.46d(d)(7).

(ii) If no visible emissions are observed for 30 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed.

(3) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A-4 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Administrator. The observations shall be similar, but not necessarily identical, to the requirements in paragraph (a)(2) of this section. For reference purposes in preparing the monitoring plan, see OAQPS "Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis

Systems.” This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Policy Group (D243-02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods.

(b) Except as provided under paragraphs (g), (h), and (i) of this section, the owner or operator of an affected facility subject to a NO<sub>x</sub> standard under §60.44b shall comply with either paragraphs (b)(1) or (b)(2) of this section.

(1) Install, calibrate, maintain, and operate CEMS for measuring NO<sub>x</sub> and O<sub>2</sub> (or CO<sub>2</sub>) emissions discharged to the atmosphere, and shall record the output of the system; or

(2) If the owner or operator has installed a NO<sub>x</sub> emission rate CEMS to meet the requirements of part 75 of this chapter and is continuing to meet the ongoing requirements of part 75 of this chapter, that CEMS may be used to meet the requirements of this section, except that the owner or operator shall also meet the requirements of §60.49b. Data reported to meet the requirements of §60.49b shall not include data substituted using the missing data procedures in subpart D of part 75 of this chapter, nor shall the data have been bias adjusted according to the procedures of part 75 of this chapter.

(c) The CEMS required under paragraph (b) of this section shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

(d) The 1-hour average NO<sub>x</sub> emission rates measured by the continuous NO<sub>x</sub> monitor required by paragraph (b) of this section and required under §60.13(h) shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under §60.44b. The 1-hour averages shall be calculated using the data points required under §60.13(h)(2).

(e) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems.

(1) For affected facilities combusting coal, wood or municipal-type solid waste, the span value for a COMS shall be between 60 and 80 percent.

(2) For affected facilities combusting coal, oil, or natural gas, the span value for NO<sub>x</sub> is determined using one of the following procedures:

(i) Except as provided under paragraph (e)(2)(ii) of this section, NO<sub>x</sub> span values shall be determined as follows:

| Fuel        | Span values for NO <sub>x</sub><br>(ppm) |
|-------------|--|
| Natural gas | 500.                                     |
| Oil         | 500.                                     |
| Coal        | 1,000.                                   |
| Mixtures    | 500 (x + y) + 1,000z.                    |

Where:

x = Fraction of total heat input derived from natural gas;

y = Fraction of total heat input derived from oil; and

z = Fraction of total heat input derived from coal.

(ii) As an alternative to meeting the requirements of paragraph (e)(2)(i) of this section, the owner or operator of an affected facility may elect to use the NO<sub>x</sub>span values determined according to section 2.1.2 in appendix A to part 75 of this chapter.

(3) All span values computed under paragraph (e)(2)(i) of this section for combusting mixtures of regulated fuels are rounded to the nearest 500 ppm. Span values computed under paragraph (e)(2)(ii) of this section shall be rounded off according to section 2.1.2 in appendix A to part 75 of this chapter.

(f) When NO<sub>x</sub>emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7 of appendix A of this part, Method 7A of appendix A of this part, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

(g) The owner or operator of an affected facility that has a heat input capacity of 73 MW (250 MMBtu/hr) or less, and that has an annual capacity factor for residual oil having a nitrogen content of 0.30 weight percent or less, natural gas, distillate oil, gasified coal, or any mixture of these fuels, greater than 10 percent (0.10) shall:

(1) Comply with the provisions of paragraphs (b), (c), (d), (e)(2), (e)(3), and (f) of this section; or

(2) Monitor steam generating unit operating conditions and predict NO<sub>x</sub>emission rates as specified in a plan submitted pursuant to §60.49b(c).

(h) The owner or operator of a duct burner, as described in §60.41b, that is subject to the NO<sub>x</sub>standards in §60.44b(a)(4), §60.44b(e), or §60.44b(l) is not required to install or operate a continuous emissions monitoring system to measure NO<sub>x</sub>emissions.

(i) The owner or operator of an affected facility described in §60.44b(j) or §60.44b(k) is not required to install or operate a CEMS for measuring NO<sub>x</sub>emissions.

(j) The owner or operator of an affected facility that meets the conditions in either paragraph (j)(1), (2), (3), (4), (5), or (6) of this section is not required to install or operate a CEMS if:

(1) The affected facility uses a PM CEMS to monitor PM emissions; or

(2) The affected facility burns only liquid (excluding residual oil) or gaseous fuels with potential SO<sub>2</sub>emissions rates of 26 ng/J (0.060 lb/MMBtu) or less and does not use a post-combustion technology to reduce SO<sub>2</sub>or PM emissions. The owner or operator must maintain fuel records of the sulfur content of the fuels burned, as described under §60.49b(r); or

(3) The affected facility burns coke oven gas alone or in combination with fuels meeting the criteria in paragraph (j)(2) of this section and does not use a post-combustion technology to reduce SO<sub>2</sub>or PM emissions; or

(4) The affected facility 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 0.30 weight percent sulfur, and is operated such that emissions of CO to the atmosphere from the affected facility are maintained at levels less than or equal to 0.15 lb/MMBtu on a steam generating unit operating day average basis. Owners and operators of affected facilities electing to comply with this paragraph must demonstrate compliance according to the procedures specified in paragraphs (j)(4)(i) through (iv) of this section; or

(i) You must monitor CO emissions using a CEMS according to the procedures specified in paragraphs (j)(4)(i)(A) through (D) of this section.

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

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

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

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

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

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

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

(5) The affected facility uses a bag leak detection system to monitor the performance of a fabric filter (baghouse) according to the most recent requirements in section §60.48Da of this part; or

(6) The affected facility burns only gaseous fuels or fuel oils that contain less than or equal to 0.30 weight percent sulfur and operates according to a written site-specific monitoring plan approved by the permitting authority. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard.

(k) Owners or operators complying with the PM emission limit by using a PM CEMS must calibrate, maintain, operate, and record the output of the system for PM emissions discharged to the atmosphere

as specified in §60.46b(j). The CEMS specified in paragraph §60.46b(j) shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5087, Jan. 28, 2009]

**§ 60.49b Reporting and recordkeeping requirements.**

(a) The owner or operator of each affected facility shall submit notification of the date of initial startup, as provided by §60.7. This notification shall include:

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

(2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §§60.42b(d)(1), 60.43b(a)(2), (a)(3)(iii), (c)(2)(ii), (d)(2)(iii), 60.44b(c), (d), (e), (i), (j), (k), 60.45b(d), (g), 60.46b(h), or 60.48b(i);

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

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

(b) The owner or operator of each affected facility subject to the SO<sub>2</sub>, PM, and/or NO<sub>x</sub> emission limits under §§60.42b, 60.43b, and 60.44b shall submit to the Administrator the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in appendix B of this part. The owner or operator of each affected facility described in §60.44b(j) or §60.44b(k) shall submit to the Administrator the maximum heat input capacity data from the demonstration of the maximum heat input capacity of the affected facility.

(c) The owner or operator of each affected facility subject to the NO<sub>x</sub> standard in §60.44b who seeks to demonstrate compliance with those standards through the monitoring of steam generating unit operating conditions in the provisions of §60.48b(g)(2) shall submit to the Administrator for approval a plan that identifies the operating conditions to be monitored in §60.48b(g)(2) and the records to be maintained in §60.49b(g). This plan shall be submitted to the Administrator for approval within 360 days of the initial startup of the affected facility. An affected facility burning coke oven gas alone or in combination with other gaseous fuels or distillate oil shall submit this plan to the Administrator for approval within 360 days of the initial startup of the affected facility or by November 30, 2009, whichever date comes later. If the plan is approved, the owner or operator shall maintain records of predicted nitrogen oxide emission rates and the monitored operating conditions, including steam generating unit load, identified in the plan. The plan shall:

(1) Identify the specific operating conditions to be monitored and the relationship between these operating conditions and NO<sub>x</sub> emission rates ( *i.e.* , ng/J or lbs/MMBtu heat input). Steam generating unit operating conditions include, but are not limited to, the degree of staged combustion ( *i.e.* , the ratio of primary air to secondary and/or tertiary air) and the level of excess air ( *i.e.* , flue gas O<sub>2</sub> level);

(2) Include the data and information that the owner or operator used to identify the relationship between NO<sub>x</sub> emission rates and these operating conditions; and

(3) Identify how these operating conditions, including steam generating unit load, will be monitored under §60.48b(g) on an hourly basis by the owner or operator during the period of operation of the affected facility; the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam generating unit load, that will be maintained by the owner or operator under §60.49b(g).

(d) Except as provided in paragraph (d)(2) of this section, the owner or operator of an affected facility shall record and maintain records as specified in paragraph (d)(1) of this section.

(1) The owner or operator of an affected facility shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for coal, distillate oil, residual oil, natural gas, wood, and municipal-type solid waste for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.

(2) As an alternative to meeting the requirements of paragraph (d)(1) of this section, the owner or operator of an affected facility that is subject to a federally enforceable permit restricting fuel use to a single fuel such that the facility is not required to continuously monitor any emissions (excluding opacity) or parameters indicative of emissions may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

(e) For an affected facility that combusts residual oil and meets the criteria under §§60.46b(e)(4), 60.44b(j), or (k), the owner or operator shall maintain records of the nitrogen content of the residual oil combusted in the affected facility and calculate the average fuel nitrogen content for the reporting period. The nitrogen content shall be determined using ASTM Method D4629 (incorporated by reference, see §60.17), or fuel suppliers. If residual oil blends are being combusted, fuel nitrogen specifications may be prorated based on the ratio of residual oils of different nitrogen content in the fuel blend.

(f) For an affected facility subject to the opacity standard in §60.43b, the owner or operator shall maintain records of opacity. In addition, an owner or operator that elects to monitor emissions according to the requirements in §60.48b(a) shall maintain records according to the requirements specified in paragraphs (f)(1) through (3) of this section, as applicable to the visible emissions monitoring method used.

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

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

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

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

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

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

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

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

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

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

(g) Except as provided under paragraph (p) of this section, the owner or operator of an affected facility subject to the NO<sub>x</sub> standards under §60.44b shall maintain records of the following information for each steam generating unit operating day:

(1) Calendar date;

(2) The average hourly NO<sub>x</sub> emission rates (expressed as NO<sub>2</sub>) (ng/J or lb/MMBtu heat input) measured or predicted;

(3) The 30-day average NO<sub>x</sub> emission rates (ng/J or lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;

(4) Identification of the steam generating unit operating days when the calculated 30-day average NO<sub>x</sub> emission rates are in excess of the NO<sub>x</sub> emissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;

(5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;

(6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;

(7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;

(8) Identification of the times when the pollutant concentration exceeded full span of the CEMS;

(9) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and

(10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.

(h) The owner or operator of any affected facility in any category listed in paragraphs (h)(1) or (2) of this section is required to submit excess emission reports for any excess emissions that occurred during the reporting period.

(1) Any affected facility subject to the opacity standards in §60.43b(f) or to the operating parameter monitoring requirements in §60.13(i)(1).

(2) Any affected facility that is subject to the NO<sub>x</sub> standard of §60.44b, and that:

(i) Combusts natural gas, distillate oil, gasified coal, or residual oil with a nitrogen content of 0.3 weight percent or less; or

(ii) Has a heat input capacity of 73 MW (250 MMBtu/hr) or less and is required to monitor NO<sub>x</sub> emissions on a continuous basis under §60.48b(g)(1) or steam generating unit operating conditions under §60.48b(g)(2).

(3) For the purpose of §60.43b, excess emissions are defined as all 6-minute periods during which the average opacity exceeds the opacity standards under §60.43b(f).

(4) For purposes of §60.48b(g)(1), excess emissions are defined as any calculated 30-day rolling average NO<sub>x</sub> emission rate, as determined under §60.46b(e), that exceeds the applicable emission limits in §60.44b.

(i) The owner or operator of any affected facility subject to the continuous monitoring requirements for NO<sub>x</sub> under §60.48(b) shall submit reports containing the information recorded under paragraph (g) of this section.

(j) The owner or operator of any affected facility subject to the SO<sub>2</sub> standards under §60.42b shall submit reports.

(k) For each affected facility subject to the compliance and performance testing requirements of §60.45b and the reporting requirement in paragraph (j) of this section, the following information shall be reported to the Administrator:

(1) Calendar dates covered in the reporting period;

(2) Each 30-day average SO<sub>2</sub> emission rate (ng/J or lb/MMBtu heat input) measured during the reporting period, ending with the last 30-day period; reasons for noncompliance with the emission standards; and a description of corrective actions taken; For an exceedance due to maintenance of the SO<sub>2</sub> control system covered in paragraph 60.45b(a), the report shall identify the days on which the maintenance was performed and a description of the maintenance;

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

(4) Identification of the steam generating unit operating days that coal or oil was combusted and for which SO<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 in the steam generating unit operating day; justification for not obtaining sufficient data; and description of corrective action taken;

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

(6) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;

(7) Identification of times when hourly averages have been obtained based on manual sampling methods;

- (8) Identification of the times when the pollutant concentration exceeded full span of the CEMS;
- (9) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3;
- (10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part; and
- (11) The annual capacity factor of each fired as provided under paragraph (d) of this section.
- (l) For each affected facility subject to the compliance and performance testing requirements of §60.45b(d) and the reporting requirements of paragraph (j) of this section, the following information shall be reported to the Administrator:
- (1) Calendar dates when the facility was in operation during the reporting period;
  - (2) The 24-hour average SO<sub>2</sub> emission rate measured for each steam generating unit operating day during the reporting period that coal or oil was combusted, ending in the last 24-hour period in the quarter; reasons for noncompliance with the emission standards; and a description of corrective actions taken;
  - (3) Identification of the steam generating unit operating days that coal or oil was combusted for which 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 description of corrective action taken;
  - (4) Identification of the times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and description of corrective action taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit;
  - (5) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;
  - (6) Identification of times when hourly averages have been obtained based on manual sampling methods;
  - (7) Identification of the times when the pollutant concentration exceeded full span of the CEMS;
  - (8) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and
  - (9) Results of daily CEMS drift tests and quarterly accuracy assessments as required under Procedure 1 of appendix F 1 of this part. If the owner or operator elects to implement the alternative data assessment procedures described in §§60.47b(e)(4)(i) through (e)(4)(iii), each data assessment report shall include a summary of the results of all of the RATAs, linearity checks, CGAs, and calibration error or drift assessments required by §§60.47b(e)(4)(i) through (e)(4)(iii).
- (m) For each affected facility subject to the SO<sub>2</sub> standards in §60.42(b) for which the minimum amount of data required in §60.47b(c) were not obtained during the reporting period, the following information is reported to the Administrator in addition to that required under paragraph (k) of this section:
- (1) The number of hourly averages available for outlet emission rates and inlet emission rates;

(2) The standard deviation of hourly averages for outlet emission rates and inlet emission rates, as determined in Method 19 of appendix A of this part, section 7;

(3) The lower confidence limit for the mean outlet emission rate and the upper confidence limit for the mean inlet emission rate, as calculated in Method 19 of appendix A of this part, section 7; and

(4) The ratio of the lower confidence limit for the mean outlet emission rate and the allowable emission rate, as determined in Method 19 of appendix A of this part, section 7.

(n) If a percent removal efficiency by fuel pretreatment ( *i.e.* , %R<sub>f</sub>) is used to determine the overall percent reduction ( *i.e.* , %R<sub>o</sub>) under §60.45b, the owner or operator of the affected facility shall submit a signed statement with the report.

(1) Indicating what removal efficiency by fuel pretreatment ( *i.e.* , %R<sub>f</sub>) was credited during the reporting period;

(2) Listing the quantity, heat content, and date each pre-treated fuel shipment was received during the reporting period, the name and location of the fuel pretreatment facility; and the total quantity and total heat content of all fuels received at the affected facility during the reporting period;

(3) Documenting the transport of the fuel from the fuel pretreatment facility to the steam generating unit; and

(4) Including a signed statement from the owner or operator of the fuel pretreatment facility certifying that the percent removal efficiency achieved by fuel pretreatment was determined in accordance with the provisions of Method 19 of appendix A of this part and listing the heat content and sulfur content of each fuel before and after fuel pretreatment.

(o) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of 2 years following the date of such record.

(p) The owner or operator of an affected facility described in §60.44b(j) or (k) shall maintain records of the following information for each steam generating unit operating day:

(1) Calendar date;

(2) The number of hours of operation; and

(3) A record of the hourly steam load.

(q) The owner or operator of an affected facility described in §60.44b(j) or §60.44b(k) shall submit to the Administrator a report containing:

(1) The annual capacity factor over the previous 12 months;

(2) The average fuel nitrogen content during the reporting period, if residual oil was fired; and

(3) If the affected facility meets the criteria described in §60.44b(j), the results of any NO<sub>x</sub>emission tests required during the reporting period, the hours of operation during the reporting period, and the hours of operation since the last NO<sub>x</sub>emission test.

(r) The owner or operator of an affected facility who elects to use the fuel based compliance alternatives in §60.42b or §60.43b shall either:

(1) The owner or operator of an affected facility who elects to demonstrate that the affected facility combusts only very low sulfur oil, natural gas, wood, a mixture of these fuels, or any of these fuels (or a mixture of these fuels) in combination with other fuels that are known to contain an insignificant amount of sulfur in §60.42b(j) or §60.42b(k) shall obtain and maintain at the affected facility fuel receipts from the fuel supplier that certify that the oil meets the definition of distillate oil and gaseous fuel meets the definition of natural gas as defined in §60.41b and the applicable sulfur limit. For the purposes of this section, the distillate oil need not meet the fuel nitrogen content specification in the definition of distillate oil. Reports shall be submitted to the Administrator certifying that only very low sulfur oil meeting this definition, natural gas, wood, and/or other fuels that are known to contain insignificant amounts of sulfur were combusted in the affected facility during the reporting period; or

(2) The owner or operator of an affected facility who elects to demonstrate compliance based on fuel analysis in §60.42b or §60.43b shall develop and submit a site-specific fuel analysis plan to the Administrator for review and approval no later than 60 days before the date you intend to demonstrate compliance. Each fuel analysis plan shall include a minimum initial requirement of weekly testing and each analysis report shall contain, at a minimum, the following information:

(i) The potential sulfur emissions rate of the representative fuel mixture in ng/J heat input;

(ii) The method used to determine the potential sulfur emissions rate of each constituent of the mixture. For distillate oil and natural gas a fuel receipt or tariff sheet is acceptable;

(iii) The ratio of different fuels in the mixture; and

(iv) The owner or operator can petition the Administrator to approve monthly or quarterly sampling in place of weekly sampling.

(s) Facility specific NO<sub>x</sub> standard for Cytec Industries Fortier Plant's C.AOG incinerator located in Westwego, Louisiana:

(1) *Definitions* .

*Oxidation zone* is defined as the portion of the C.AOG incinerator that extends from the inlet of the oxidizing zone combustion air to the outlet gas stack.

*Reducing zone* is defined as the portion of the C.AOG incinerator that extends from the burner section to the inlet of the oxidizing zone combustion air.

*Total inlet air* is defined as the total amount of air introduced into the C.AOG incinerator for combustion of natural gas and chemical by-product waste and is equal to the sum of the air flow into the reducing zone and the air flow into the oxidation zone.

(2) *Standard for nitrogen oxides* . (i) When fossil fuel alone is combusted, the NO<sub>x</sub> emission limit for fossil fuel in §60.44b(a) applies.

(ii) When natural gas and chemical by-product waste are simultaneously combusted, the NO<sub>x</sub> emission limit is 289 ng/J (0.67 lb/MMBtu) and a maximum of 81 percent of the total inlet air provided for combustion shall be provided to the reducing zone of the C.AOG incinerator.

(3) *Emission monitoring* . (i) The percent of total inlet air provided to the reducing zone shall be determined at least every 15 minutes by measuring the air flow of all the air entering the reducing zone and the air flow of all the air entering the oxidation zone, and compliance with the percentage of total inlet air that is provided to the reducing zone shall be determined on a 3-hour average basis.

(ii) The NO<sub>x</sub>emission limit shall be determined by the compliance and performance test methods and procedures for NO<sub>x</sub>in §60.46b(i).

(iii) The monitoring of the NO<sub>x</sub>emission limit shall be performed in accordance with §60.48b.

(4) *Reporting and recordkeeping requirements* . (i) The owner or operator of the C.AOG incinerator shall submit a report on any excursions from the limits required by paragraph (a)(2) of this section to the Administrator with the quarterly report required by paragraph (i) of this section.

(ii) The owner or operator of the C.AOG incinerator shall keep records of the monitoring required by paragraph (a)(3) of this section for a period of 2 years following the date of such record.

(iii) The owner of operator of the C.AOG incinerator shall perform all the applicable reporting and recordkeeping requirements of this section.

(t) Facility-specific NO<sub>x</sub>standard for Rohm and Haas Kentucky Incorporated's Boiler No. 100 located in Louisville, Kentucky:

(1) *Definitions* .

*Air ratio control damper* is defined as the part of the low NO<sub>x</sub>burner that is adjusted to control the split of total combustion air delivered to the reducing and oxidation portions of the combustion flame.

*Flue gas recirculation line* is defined as the part of Boiler No. 100 that recirculates a portion of the boiler flue gas back into the combustion air.

(2) *Standard for nitrogen oxides* . (i) When fossil fuel alone is combusted, the NO<sub>x</sub>emission limit for fossil fuel in §60.44b(a) applies.

(ii) When fossil fuel and chemical by-product waste are simultaneously combusted, the NO<sub>x</sub>emission limit is 473 ng/J (1.1 lb/MMBtu), and the air ratio control damper tee handle shall be at a minimum of 5 inches (12.7 centimeters) out of the boiler, and the flue gas recirculation line shall be operated at a minimum of 10 percent open as indicated by its valve opening position indicator.

(3) *Emission monitoring for nitrogen oxides* . (i) The air ratio control damper tee handle setting and the flue gas recirculation line valve opening position indicator setting shall be recorded during each 8-hour operating shift.

(ii) The NO<sub>x</sub>emission limit shall be determined by the compliance and performance test methods and procedures for NO<sub>x</sub>in §60.46b.

(iii) The monitoring of the NO<sub>x</sub>emission limit shall be performed in accordance with §60.48b.

(4) *Reporting and recordkeeping requirements* . (i) The owner or operator of Boiler No. 100 shall submit a report on any excursions from the limits required by paragraph (b)(2) of this section to the Administrator with the quarterly report required by §60.49b(i).

(ii) The owner or operator of Boiler No. 100 shall keep records of the monitoring required by paragraph (b)(3) of this section for a period of 2 years following the date of such record.

(iii) The owner or operator of Boiler No. 100 shall perform all the applicable reporting and recordkeeping requirements of §60.49b.

(u) *Site-specific standard for Merck & Co., Inc.'s Stonewall Plant in Elkton, Virginia*. (1) This paragraph (u) applies only to the pharmaceutical manufacturing facility, commonly referred to as the Stonewall Plant, located at Route 340 South, in Elkton, Virginia ("site") and only to the natural gas-fired boilers installed as part of the powerhouse conversion required pursuant to 40 CFR 52.2454(g). The requirements of this paragraph shall apply, and the requirements of §§60.40b through 60.49b(t) shall not apply, to the natural gas-fired boilers installed pursuant to 40 CFR 52.2454(g).

(i) The site shall equip the natural gas-fired boilers with low NO<sub>x</sub> technology.

(ii) The site shall install, calibrate, maintain, and operate a continuous monitoring and recording system for measuring NO<sub>x</sub> emissions discharged to the atmosphere and opacity using a continuous emissions monitoring system or a predictive emissions monitoring system.

(iii) Within 180 days of the completion of the powerhouse conversion, as required by 40 CFR 52.2454, the site shall perform a performance test to quantify criteria pollutant emissions.

(2) [Reserved]

(v) The owner or operator of an affected facility may submit electronic quarterly reports for SO<sub>2</sub> and/or NO<sub>x</sub> and/or opacity in lieu of submitting the written reports required under paragraphs (h), (i), (j), (k) or (l) of this section. The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format.

(w) The reporting period for the reports required under this subpart is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

(x) Facility-specific NO<sub>x</sub> standard for Weyerhaeuser Company's No. 2 Power Boiler located in New Bern, North Carolina:

(1) *Standard for nitrogen oxides*. (i) When fossil fuel alone is combusted, the NO<sub>x</sub> emission limit for fossil fuel in §60.44b(a) applies.

(ii) When fossil fuel and chemical by-product waste are simultaneously combusted, the NO<sub>x</sub> emission limit is 215 ng/J (0.5 lb/MMBtu).

(2) *Emission monitoring for nitrogen oxides*. (i) The NO<sub>x</sub> emissions shall be determined by the compliance and performance test methods and procedures for NO<sub>x</sub> in §60.46b.

(ii) The monitoring of the NO<sub>x</sub> emissions shall be performed in accordance with §60.48b.

(3) *Reporting and recordkeeping requirements* . (i) The owner or operator of the No. 2 Power Boiler shall submit a report on any excursions from the limits required by paragraph (x)(2) of this section to the Administrator with the quarterly report required by §60.49b(i).

(ii) The owner or operator of the No. 2 Power Boiler shall keep records of the monitoring required by paragraph (x)(3) of this section for a period of 2 years following the date of such record.

(iii) The owner or operator of the No. 2 Power Boiler shall perform all the applicable reporting and recordkeeping requirements of §60.49b.

(y) Facility-specific NO<sub>x</sub> standard for INEOS USA's AOGI located in Lima, Ohio:

(1) *Standard for NO<sub>x</sub>*. (i) When fossil fuel alone is combusted, the NO<sub>x</sub> emission limit for fossil fuel in §60.44b(a) applies.

(ii) When fossil fuel and chemical byproduct/waste are simultaneously combusted, the NO<sub>x</sub> emission limit is 645 ng/J (1.5 lb/MMBtu).

(2) *Emission monitoring for NO<sub>x</sub>*. (i) The NO<sub>x</sub> emissions shall be determined by the compliance and performance test methods and procedures for NO<sub>x</sub> in §60.46b.

(ii) The monitoring of the NO<sub>x</sub> emissions shall be performed in accordance with §60.48b.

(3) *Reporting and recordkeeping requirements* . (i) The owner or operator of the AOGI shall submit a report on any excursions from the limits required by paragraph (y)(2) of this section to the Administrator with the quarterly report required by paragraph (i) of this section.

(ii) The owner or operator of the AOGI shall keep records of the monitoring required by paragraph (y)(3) of this section for a period of 2 years following the date of such record.

(iii) The owner or operator of the AOGI shall perform all the applicable reporting and recordkeeping requirements of this section.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5089, Jan. 28, 2009]

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

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

**Source Description and Location**

|                                       |  |
|---------------------------------------|--|
| Source Name:                          | U.S. Steel - East Chicago Tin Products |
| Source Location:                      | 101 E 129th St, East Chicago, IN 46312 |
| County:                               | Lake                                   |
| SIC Code:                             | 3313, 3316                             |
| Part 70 Operation Permit Renewal No.: | T089-27328-00300                       |
| Operation Permit Issuance Date:       | October 22, 2009                       |
| Significant Source Modification No.:  | 089-28852-00300                        |
| Significant Permit Modification No.:  | 089-28872-00300                        |
| Permit Reviewer:                      | Laura Spriggs                          |

**Public Notice Information**

On February 16, 2010, the Office of Air Quality (OAQ) had a notice published in *The Times* in Munster, Indiana and *The Post Tribune* in Merrillville, Indiana, stating that U.S. Steel - East Chicago Tin Products had applied for a significant modification to their Part 70 Operating Permit Renewal, issued on October 22, 2009 to install a natural gas-fired steam generation boiler. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

**Comments Received**

IDEM, OAQ did not receive any comments related to draft Significant Source Modification No. 089-28852-00300 or draft Significant Permit Modification No. 089-28872-00300 during the public notice period.

**Other Changes**

Upon further review, IDEM, OAQ has decided to make changes to the permit as described below, with deleted language as ~~strikeouts~~ and new language **bolded**.

IDEM, OAQ does not amend the Technical Support Document (TSD). The TSD is maintained to document the original review. This addendum to the TSD is used to document responses to comments and changes made from the time the permit was drafted until a final decision is made.

**Change No. 1:**

IDEM, OAQ has made changes to some of the standard language in the B and C conditions of the permit to help clarify the intent of these conditions. The following revisions have been made to the

B and C Sections of the permit:

- (a) **Multiple Conditions**  
IDEM, OAQ has decided that the phrases "no later than" and "not later than" are clearer than "within" in relation to the end of a timeline. Therefore, all references to timelines have been revised to "no later than" or "not later than" except for the timelines in subparagraphs (b)(4) and (b)(5) of Section B - Emergency Provisions and Section B - Annual Fee Payment, in which the underlying rules state "within".
- (b) **Multiple Conditions**  
326 IAC 2-7 requires that "a responsible official" perform certain actions. 326 IAC 2-7-1(34) allows for multiple people to meet the definition of "responsible official." Therefore, IDEM, OAQ is revising all instances of "the responsible official" to read "a responsible official".
- (c) **Multiple Conditions**  
IDEM, OAQ has decided to clarify what rule requirements a certification needs to meet.
- (d) **Section B - Duty to Provide Information**  
IDEM, OAQ has revised Section B - Duty to Provide Information by removing the statement that the submittal by the Permittee requires the certification by the "responsible official".
- (e) **Section B - Certification**  
To clarify that Section B - Certification only states what a certification must be, IDEM, OAQ has revised the condition.
- (f) **Section B - Preventive Maintenance Plan**  
IDEM, OAQ has added a new paragraph (b) to handle a future situation where the Permittee adds units that need preventive maintenance plans developed. IDEM, OAQ has also decided to clarify other aspects of Section B - Preventive Maintenance Plan.
- (g) **Section B - Deviation from Permit Requirements and Section C - General Reporting Requirements**  
IDEM, OAQ has decided that having a separate condition for the reporting of deviations is unnecessary. Therefore, Section B - Deviation from Permit Requirements and Conditions has been removed and the requirements of that condition have been added to Section C - General Reporting Requirements. Paragraph (d) of Section C - General Reporting Requirements has been removed because IDEM, OAQ already states the timeline and certification needs of each report in the condition requiring the report. Subparagraph (g)(4), which is now (f)(4), has been revised to match the underlying rule language.
- (h) **Section B - Permit Renewal**  
IDEM, OAQ has decided to state which rule establishes the authority to set a deadline for the Permittee to submit additional information. Therefore, Section B - Permit Renewal has been revised.
- (i) **Section B - Permit Revision Under Economic Incentives and Other Programs**  
IDEM, OAQ has decided to state that no notice is required for approved changes in Section B - Permit Revision Under Economic Incentives and Other Programs.
- (j) **Section C - Opacity**  
IDEM, OAQ has added 326 IAC 5-1-1 to the exception clause of Section C - Opacity, since 326 IAC 5-1-1 does list exceptions.

- (k) **Section C - Incineration**  
IDEM, OAQ has revised Section C - Incineration to more closely reflect the two underlying rules.
- (l) **Section C - Performance Testing**  
IDEM, OAQ has removed the first paragraph of Section C - Performance Testing due to the fact that specific testing conditions elsewhere in the permit will specify the timeline and procedures.
- (m) **Section C - Compliance Monitoring**  
IDEM, OAQ has revised Section C - Compliance Monitoring. The reference to recordkeeping has been removed due to the fact that other conditions already address recordkeeping. The voice of the condition has been changed to clearly indicate that it is the Permittee that must follow the requirements of the condition.
- (n) **Section C - Monitoring Methods**  
IDEM, OAQ has removed Section C - Monitoring Methods. The conditions that require the monitoring or testing, if required, state what methods shall be used.
- (o) **Section C - Response to Excursions or Exceedances**  
IDEM, OAQ has revised Section C - Response to Excursions or Exceedances. The introduction sentence has been added to clarify that it is only when an excursion or exceedance is detected that the requirements of this condition need to be followed. The word "excess" was added to the last sentence of paragraph (a) because the Permittee only has to minimize excess emissions. The middle of paragraph (b) has been deleted as it was duplicative of paragraph (a). The phrase "or are returning" was added to subparagraph (b)(2) as this is an acceptable response assuming the operation or emission unit does return to normal or its usual manner of operation. The phrase "within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable" was replaced with "normal or usual manner of operation" because the first phrase is just a limited list of the second phrase. The recordkeeping required by paragraph (e) was changed to require only records of the response because the previously listed items are required to be recorded elsewhere in the permit.
- (p) **Section C - Actions Related to Noncompliance Demonstrated by a Stack Test**  
IDEM, OAQ has revised Section C - Actions Related to Noncompliance Demonstrated by a Stack Test. The requirements to take response steps and minimize excess emissions have been removed because Section C - response to Excursions or Exceedances already requires response steps related to exceedances and excess emissions minimization. The start of the timelines was revised from "the receipt of the test results" to "the date of the test". There was confusion if the "receipt" was by IDEM, the Permittee or someone else. Since the start of the timelines has been moved up, the length of the timelines was increased. The new timelines require action within a comparable timeline; and the new timelines still ensure that the Permittee will return to compliance within a reasonable timeframe.
- (q) **Section C - Emission Statement**  
IDEM, OAQ decided to remove paragraph (c) of Section C - Emission Statement since it was duplicative of the requirement in Section C - General Reporting Requirements.
- (r) **Section C - General Record Keeping Requirements**  
The voice of paragraph (b) of Section C - General Record Keeping Requirements has been changed to clearly indicate that it is the Permittee that must follow the requirements of the paragraph.

- (s) Section C - Compliance with 40 CFR 82 and 326 IAC 22-1  
IDEM, OAQ has decided to simplify the referencing in Section C - Compliance with 40 CFR 82 and 326 IAC 22-1.

The permit has been revised as follows:

## SECTION B GENERAL CONDITIONS

\* \* \*

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

---

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

- (b) \* \* \*

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

---

- (a) ~~Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by the "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 its equivalent** with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

- (c) \* \* \*

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

---

- (a) \* \* \*

- (b) \* \* \*

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

(1) \* \* \*

(2) \* \* \*

(3) \* \* \*

(4) \* \* \*

(5) \* \* \*

The submittal by the Permittee does require ~~the a~~ certification ~~by~~ **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]

~~(a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) 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.

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

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;**
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and**
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.**

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

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

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

**(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 **and their submittal** do 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).

- (ed) 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) \* \* \*

- (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) \* \* \*

(2) \* \* \*

(3) \* \* \*

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

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

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

\* \* \*

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) \* \* \*

\* \* \*

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

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

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

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

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

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

**B.4615** Permit Modification, Reopening, Revocation and Reissuance, or Termination

~~[326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]~~

- 
- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit.  
~~[326 IAC 2-7-5(6)(C)]~~ The notification by the Permittee does require ~~the 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.4716** 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).

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) \* \* \*

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

**B.4817** Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]

---

(a) \* \* \*

(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~~ **does 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) \* \* \*

**B.4918** Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]  
[326 IAC 2-7-12(b)(2)]

---

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

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

**B.2019** Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

---

(a) \* \* \*

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

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

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

\* \* \*

**B.2420** Source Modification Requirement [326 IAC 2-7-10.5]

---

\* \* \*

**B.2221** Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

\*\*\*

**B.2322** Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) \*\*\*

- (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~~**Any such** application ~~which shall be submitted by the Permittee~~ does require ~~the~~ certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ "responsible official" as defined by 326 IAC 2-7-1(34).

(c) \*\*\*

**B.2423** Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

\*\*\*

**B.2524** Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

\*\*\*

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:

\*\*\*

**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.**

\*\*\*

**C.6** Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) \*\*\*

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

All required notifications shall be submitted to:

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

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

- (e) \* \* \*
- (f) \* \* \*
- (g) \* \* \*

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

##### C.7 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.~~

**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~~ "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~~ "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) \* \* \*

\* \* \*

C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, ~~for all monitoring and record keeping requirements not already legally required, the Permittee shall be implemented with~~ **allowed up to** ninety (90) days **from the date** of permit issuance or ~~ninety (90) days of initial start-up, whichever is later. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required, to begin such monitoring related to that equipment.~~ If due to circumstances beyond ~~the Permittee's control, that equipment~~ **any monitoring equipment required by this permit** cannot be installed and operated ~~with~~ **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.

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.~~

C.4410 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

\* \* \*

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

C.4211 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) \* \* \*

(b) These ERPs shall be submitted for approval 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

~~with~~ **no later than** 180 days from the date on which this source commences operation.

The ERP 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.1312~~ Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

---

\* \* \*

~~C.1413~~ 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~~**normal** or ~~standard, as applicable~~**usual manner of operation.**
- (c) \* \* \*
- (d) \* \* \*
- (e) The Permittee shall ~~maintain record the following records:~~**reasonable response steps taken.**
- (1) ~~monitoring data;~~
  - (2) ~~monitor performance data, if applicable; and~~
  - (3) ~~corrective actions taken.~~

C.4514 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall ~~take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.~~ **no later than seventy-five (75) days of receipt after 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 twenty (20) days of receipt of the original test results.~~ **no later than one hundred twenty (120) days of receipt after the original date of the test results.** Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred ~~twenty (20)~~ **eighty (80) days** is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require ~~the 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).

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

C.4615 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) \* \* \*
- (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.~~

~~C.4716~~ 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 ~~implemented within~~ **allowed up to** ninety (90) days **from the date** of permit issuance or ~~ninety (90) days~~ **the date** of initial start-up, whichever is later, **to begin such record keeping.**
- (c) \* \* \*
- (d) \* \* \*

~~C.4817~~ 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~~ "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 report required in (a) of this condition and 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) \* \* \*
- ~~(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~
- ~~(ed)~~ \* \* \*
- ~~(fe)~~ \* \* \*
- (gf) The report for project at an existing emissions unit shall be submitted ~~within~~ **no later than** sixty (60) days after the end of the year and contain the following:

- (1) \* \* \*
- (2) \* \* \*
- (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 projection.**

Reports required in this part shall be submitted to:

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

(hg) \* \* \*

### Stratospheric Ozone Protection

#### C.4918 Compliance with 40 CFR 82 and 326 IAC 22-1

---

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with ~~the~~**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 82.164.~~

#### Change No. 2:

The following changes have been made to Section D.7 of the permit:

- (a) For clarity, IDEM, OAQ has changed references to the general conditions such as "in accordance with Section B", "in accordance with Section C", or other similar language to "Section C...contains the Permittee's obligations with regard to the records required by this condition.

- (b) IDEM, OAQ has decided that the phrases "no later than" and "not later than" are clearer than "within" in relation to the end of a timeline. Therefore, all references to timelines have been revised to "no later than" or "not later than".
- (c) The word "status" has been added to the Record Keeping Requirements and Reporting Requirements. The Permittee has the obligation to document the compliance status. The wording has been revised to properly reflect this.
- (d) 326 IAC 2-7 requires that "a responsible official" perform certain actions. 326 IAC 2-7-1(34) allows for multiple people to meet the definition of "responsible official." Therefore, IDEM, OAQ is revising all instances of "the responsible official" to read "a responsible official".
- (e) IDEM, OAQ has decided to clarify what rule requirements a certification needs to meet.

The permit has been revised as follows:

D.7.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

~~A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for this facility. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

Compliance Determination Requirements

D.7.4 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 3-5] [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)(A)(iii)]

- (a) Pursuant to 326 IAC 3-5-1(b)(1) and (2) and in order to determine compliance with Condition D.7.2, ~~within~~ **no later than** one hundred eighty (180) days of startup of emission unit B-1, the Permittee shall install, calibrate, maintain, operate, and certify a continuous emission monitoring system (CEMS) and related equipment for measuring NOx emissions from emission unit B-1 in accordance with 326 IAC 3-5 and 40 CFR 60, Subpart Db.

\* \* \*

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

D.7.5 Record Keeping Requirements

- (a) To document **the** compliance **status** with Condition D.7.2, the Permittee shall maintain records of the NOx CEMS output. Records shall be complete and sufficient to establish compliance with the NOx limit in Condition D.7.2 on a monthly basis.
- (b) \* \* \*
- (c) \* \* \*
- (d) ~~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 records required by this condition.**

**D.7.6 Reporting Requirements**

---

- (a) ~~In order to document compliance with Condition D.7.2, the Permittee shall submit a A~~ quarterly summary of the monthly NOx emissions to **document the compliance status with Condition D.7.2 shall be submitted** the address listed in ~~Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or its equivalent, within not later than thirty (30) days after the end of the quarter being reported.~~ **Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.** The report submitted by the Permittee does require a certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the a~~ a "responsible official" as defined by 326 IAC 2-71-(34).
- (b) \* \* \*

**Change No. 3**

The following changes have been made to the forms at the end of the permit:

- (a) IDEM, OAQ has decided to remove the last sentence dealing with the need for certification from the forms because the Conditions requiring the forms already address this issue.
- (b) The phrase "of this permit" has been added to the paragraph of the Quarterly Deviation and Compliance Monitoring Report to match the underlying rule.

The permit has been revised as follows:

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

\* \* \*

Form Completed by: \_\_\_\_\_

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

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

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

A certification is not required for this report.

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

Part 70 Quarterly Report

\* \* \*

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

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

~~Attach a signed certification to complete this report.~~

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE AND ENFORCEMENT BRANCH  
PART 70 OPERATING PERMIT  
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: U.S. Steel - East Chicago Tin Products  
Source Address: 101 East 129th Street, East Chicago, Indiana 46312  
Mailing Address: One North Broadway, Mail Station 70A, East Chicago, IN 46312  
Part 70 Permit No.: T089-27328-00300

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".

\* \* \*

Form Completed by: \_\_\_\_\_

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

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

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

~~Attach a signed certification to complete this report.~~

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

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

**Source Description and Location**

|                                       |  |
|---------------------------------------|--|
| Source Name:                          | U.S. Steel - East Chicago Tin Products |
| Source Location:                      | 101 E 129th St, East Chicago, IN 46312 |
| County:                               | Lake                                   |
| SIC Code:                             | 3313, 3316                             |
| Part 70 Operation Permit Renewal No.: | T089-27328-00300                       |
| Operation Permit Issuance Date:       | October 22, 2009                       |
| Significant Source Modification No.:  | 089-28852-00300                        |
| Significant Permit Modification No.:  | 089-28872-00300                        |
| Permit Reviewer:                      | Laura Spriggs                          |

**Source Definition**

U.S. Steel - East Chicago Tin Products is considered a separate source from U.S. Steel - Gary Works. U.S. Steel - East Chicago Tin Products is not a support facility for U.S. Steel - Gary Works because less than fifty (50%) percent of its output is dedicated to U.S. Steel - Gary Works and the two mills are ten (10) miles apart. Therefore, U.S. Steel - East Chicago Tin Products is considered a completely separate operation from U.S. Steel - Gary Works.

**Existing Approvals**

The source was issued Part 70 Operating Permit Renewal No. T089-27328-00300 on October 22, 2009. There have been no approvals issued since the Part 70 Operating Permit Renewal was issued.

**County Attainment Status**

The source is located in Lake County.

| 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>   | 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 PM2.5.

(a) Ozone Standards

- (1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, and St. Joseph as attainment for the 8-hour ozone standard.
- (3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.
- (4) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone.

(i) 1-hour ozone standard

On December 22, 2006 the United States Court of Appeals, District of Columbia issued a decision which 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 NOx 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 Emission Offset, 326 IAC 2-3. See the State Rule Applicability - Entire Source section.

(ii) 8-hour ozone standard

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 NOx emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability – Entire Source section.

(b) PM2.5

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 lawsuit 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, 2008, and effective on July 15, 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) **Other Criteria Pollutants**  
Lake County has been classified as attainment or unclassifiable in Indiana for all other regulated pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) Since this source is classified as a steel mill, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (e) **Fugitive Emissions**  
Since this type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

|                      |
|----------------------|
| <b>Source Status</b> |
|----------------------|

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> |
|-------------------|---------------------------|
| PM                | 30.55                     |
| PM <sub>10</sub>  | 35.55                     |
| PM <sub>2.5</sub> | 35.55                     |
| SO <sub>2</sub>   | 0.394                     |
| VOC               | 36.49                     |
| CO                | 55.18                     |
| NO <sub>x</sub>   | 65.7                      |

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because PM, PM<sub>10</sub>, SO<sub>2</sub>, CO, and NO<sub>x</sub> are not emitted at a rate of 100 tons per year or more, and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (b) This existing source is a major stationary source, under Emission Offset (326 IAC 2-3), because VOC is emitted at a rate of 25 tons per year or more.
- (c) This existing source is not a major stationary source, under Nonattainment New Source Review (326 IAC 2-1.1-5), because direct PM<sub>2.5</sub> and SO<sub>2</sub> are not emitted at a rate of 100 tons per year or more.
- (d) These emissions are based upon controlled emissions from the 6-Stand Cold Reduction Mill and uncontrolled emissions from the remaining emission units as determined in Part 70 Operating Permit Renewal No. T089-27328-00300.

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

| HAPs              | Potential To Emit (ton/yr) |
|-------------------|----------------------------|
| Single HAP        | Greater than 10            |
| <b>Total HAPs</b> | <b>Greater than 25</b>     |

This existing source is a major source of HAPs, as defined in 40 CFR 63.2, because HAP emissions are greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

**Actual Emissions**

The following table shows the actual emissions from the source. This information reflects the 2006 OAQ emission data.

| Pollutant         | Actual Emissions (ton/yr) |
|-------------------|---------------------------|
| PM                | Not Reported              |
| PM <sub>10</sub>  | 0.68                      |
| PM <sub>2.5</sub> | 0.68                      |
| SO <sub>2</sub>   | 0.09                      |
| VOC               | 0.87                      |
| CO                | 13.29                     |
| NO <sub>x</sub>   | 15.82                     |
| Total HAPs        | Not Reported              |

**Description of Proposed Modification**

The Office of Air Quality (OAQ) has reviewed a modification application, received from U.S. Steel - East Chicago Tin Products on January 6, 2010, relating to the addition of a new natural gas-fired boiler. The following is the proposed emission unit:

- One (1) natural gas-fired steam generation boiler (emission unit B-1), approved in 2010 for construction, with a maximum heat input capacity of 181.8 MMBtu/hr, using low NOx burners and flue gas recirculation, and exhausting through one (1) stack (SS-1).

U.S. Steel - East Chicago Tin Products currently purchases its steam from a nearby off-site facility. The proposed boiler will be used to replace the off-site purchase of steam and provide independent steam generation capability to the plant. This modification will not debottleneck or lead to increased utilization of processes at the U.S. Steel - East Chicago Tin Products plant.

**Enforcement Issues**

There are no pending enforcement actions related to this modification.

**Emission Calculations**

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

**Permit Level Determination – Part 70**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency.”

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

| <b>Unrestricted PTE of the Modification</b> |                                   |
|---|-----------------------------------|
| <b>Pollutant</b>                            | <b>Potential To Emit (ton/yr)</b> |
| PM  | 1.5                               |
| PM <sub>10</sub>                            | 5.9                               |
| PM <sub>2.5</sub>                           | 5.9                               |
| SO <sub>2</sub>                             | 0.5                               |
| VOC   | 4.3                               |
| CO  | 65.6                              |
| NO <sub>x</sub>                             | 39.8                              |

| <b>Unrestricted HAP PTE of the Modification</b> |                                   |
|---|-----------------------------------|
| <b>HAPs*</b>                                    | <b>Potential To Emit (ton/yr)</b> |
| TOTAL   | 5.4 E-02                          |

\*PTE of individual HAPs can be found in Appendix A of this TSD.

This source modification is subject to 326 IAC 2-7-10.5(f)(4) (significant source modification) because the modification has the potential to emit greater than or equal to twenty-five (25) tons per year of NOx. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12 because the modification involves a modification under Title I of the Clean Air Act, the modification involves significant changes to existing monitoring requirements, and the modification involves a case-by-case determination of an emission limitation.

**Permit Level Determination – PSD, Emission Offset, and Nonattainment NSR**

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

| <b>Process / Emission Unit</b>      | <b>Potential to Emit (ton/yr)</b> |                        |                         |                       |                 |           |                       |
|-------------------------------------|-----------------------------------|------------------------|-------------------------|-----------------------|-----------------|-----------|-----------------------|
|                                     | <b>PM</b>                         | <b>PM<sub>10</sub></b> | <b>PM<sub>2.5</sub></b> | <b>SO<sub>2</sub></b> | <b>VOC</b>      | <b>CO</b> | <b>NO<sub>x</sub></b> |
| Total for Modification (Boiler B-1) | 1.5                               | 5.9                    | 5.9                     | 0.5                   | 4.3             | 65.6      | 39.8                  |
| PSD Significant Level               | 25                                | 15                     | N/A                     | 40                    | N/A             | 100       | 40                    |
| Emission Offset Significant Level   | N/A                               | N/A                    | N/A                     | N/A                   | 25 <sup>1</sup> | N/A       | 40 <sup>2</sup>       |

| Process / Emission Unit             | 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> |
| Nonattainment NSR Significant Level | N/A                        | N/A              | 10                | 40              | N/A  | N/A   | N/A             |
| Total Source PTE After Modification | 32.0                       | 41.5             | 41.5              | 0.9             | 40.8 | 120.8 | 105.5           |

<sup>1</sup>Pursuant to the 1-hr ozone standard.

<sup>2</sup>Pursuant to the 8-hr ozone standard.

| De Minimis Analysis   |              |
|---|--------------|
| Process/Emission Unit   | VOC (ton/yr) |
| Emissions Increase Upon Issuance (Boiler B-1)                             | 4.3          |
| Other Net Emissions Increases from 2006 to 2010                           | 0            |
| <b>Total Net Emissions Increase for the Project and from 2006 to 2010</b> | <b>4.3</b>   |
| <b>De Minimis Level</b>   | <b>25</b>    |

- (a) This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply. Note: After this modification, the source will be considered major for PSD since the potential to emit NO<sub>x</sub> and CO will each exceed 100 tons per year.
- (b) This modification to an existing major stationary source is not major because the emissions increase is less than the Emission Offset and Nonattainment NSR significant levels. Therefore, pursuant to 326 IAC 2-3 and 326 IAC 2-1.1-5, the Emission Offset and Nonattainment NSR requirements do not apply.
- (c) De Minimis
  - (1) Pursuant to 326 IAC 2-3-1(z), a major modification also includes an increase in VOC emissions that is not de minimis in areas classified as serious or severe nonattainment for ozone.
  - (2) Pursuant to 326 IAC 2-3-1(q), de minimis means an increase that does not exceed twenty-five (25) tons per year when the net emissions increases from the proposed modification are aggregated on a pollutant specific basis with all other net emissions increases from the source over a five (5) consecutive calendar year period prior to, and including, the year of the modification.
    - (A) This modification is expected to commence operation in 2010; therefore, the net emissions increases from the source have been evaluated from 2006 through 2010.
    - (B) There were no other projects identified for U.S. Steel - East Chicago Tin Products during the 2006 - 2010 time period; therefore there were no other net emissions increases during the 2006 - 2010 time period.
  - (3) This modification to an existing major stationary source is not major because the net emissions increases from the proposed modification, aggregated with all other net emissions increases from the source from 2006 to 2010 do not exceed twenty-five (25) tons per year of VOC. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Since this source is considered an existing major source and is using an alternative emission factor for NO<sub>x</sub> for natural gas combustion, the source shall limit the NO<sub>x</sub> emissions as follows:

In order to make the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset) not applicable, the NO<sub>x</sub> emissions from the natural gas-fired steam generation boiler (emission unit B-1) shall be less than forty (40) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

### **Federal Rule Applicability Determination**

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

#### **New Source Performance Standards (NSPS):**

- (a) The natural gas-fired steam generation boiler (emission unit B-1) is not subject to the requirements of the New Source Performance Standard for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971, 40 CFR 60.40, Subpart D, because emission unit B-1 has a heat input rate of less than 250 MMBtu/hr.
- (b) The natural gas-fired steam generation boiler (emission unit B-1) is not subject to the requirements of the New Source Performance Standard for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978, 40 CFR 60.40Da, Subpart Da, because emission unit B-1 does not meet the definition of an electric utility steam generating unit.
- (c) The natural gas-fired steam generation boiler (emission unit B-1) is subject to the New Source Performance Standards for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60.40b, Subpart Db, which is incorporated by reference as 326 IAC 12, because boiler B-1 will be constructed after June 19, 1984 and will have a heat input capacity greater than 100 MMBtu/hr.

The entire rule has been included as Attachment B to the permit. Emission unit B-1 is subject to the following portions of Subpart, Db:

- (1) 40 CFR 60.40b(a);
  - (2) 40 CFR 60.41b;
  - (3) 40 CFR 60.42b(k)(2);
  - (4) 40 CFR 60.44b(a)(1), (h), (i);
  - (5) 40 CFR 60.46b(a), (c), (e);
  - (6) 40 CFR 60.48b(b)(1), (c), (d), (e)(2), (f);
  - (7) 40 CFR 60.49b(a), (b), (d), (g), (h)(2), (i), (o), (r)(1), (v), (w).
- (d) The natural gas-fired steam generation boiler (emission unit B-1) is not subject to the requirements of the New Source Performance Standard Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60.40c, Subpart Dc, because emission unit B-1 has a heat input rate of greater than 100 MMBtu/hr.

#### **National Emission Standards for Hazardous Air Pollutants (NESHAP):**

- (e) The natural gas-fired steam generation boiler (emission unit B-1) would have been subject to the requirements of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD. However, on June 8, 2007, the United States Court of appeals for the District of Columbia Circuit (in NRDC v. EPA, no. 04-1386) vacated in its entirety the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD. Additionally, since the state rule at 326 IAC 20-95 incorporated the requirements of the NESHAP 40

CFR 63, Subpart DDDDD by reference, the requirements of 326 IAC 20-95 are no longer effective. Therefore, the requirements of 40 CFR 63, Subpart DDDDD and 326 IAC 20-95 are not included in the permit.

The natural gas-fired steam generation boiler (emission unit B-1) is not subject to the requirements of Section 112(g) of the Clean Air Act (40 CFR 63.40-44) (Case-by-case MACT) because it is not considered a major source of hazardous air pollutants because it does not have the potential to emit greater than 10 tons per year of a single HAP or greater than 25 tons per year of a combination of HAPs.

**Compliance Assurance Monitoring (CAM):**

- (f) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:
- (1) has a potential to emit before controls equal to or greater than the Part 70 major source threshold for the pollutant involved;
  - (2) is subject to an emission limitation or standard for that pollutant; and
  - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

Combustion process design features, such as low-NOx burners and flue gas recirculation are not considered control devices, as defined in 40 CFR 64.1. Therefore, based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to emission unit B-1 as part of this modification.

|   |
|---|
| <b>State Rule Applicability Determination</b> |
|---|

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

**326 IAC 1-5-2 (Emergency Reduction Plans)**

U.S. Steel - East Chicago Tin Products now has the potential to emit 100 tons or more per year of NOx and CO; therefore, this source is subject to the provisions of 326 IAC 1-5-2. The Permittee shall submit to IDEM, OAQ, for approval, written emergency reduction plans consistent with safe operating procedures no later than one-hundred eighty (180) days from the date that the proposed boiler (emission unit B-1) commences operation.

**326 IAC 2-1.1-5 (Nonattainment New Source Review)**

This modification to an existing major stationary source is not major because the emissions increase is less than the Nonattainment NSR significant levels for PM2.5 and SO2. Therefore, pursuant to 326 IAC 2-1.1-5, the Nonattainment NSR requirements do not apply.

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

- (a) This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels for PM, PM10, SO2, CO, and NOx. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.
- (b) This modification to an existing major stationary source is not major because the emissions increase is less than the Emission Offset significant levels for VOC and NOx. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.
- (c) This modification to an existing major stationary source is not major because the net emissions increases from the proposed modification, aggregated with all other net emissions increases from the source from 2006 to 2010 do not exceed twenty-five (25)

tons per year of VOC. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Since this source is considered an existing major source and is using an alternative emission factor for NO<sub>x</sub> for natural gas combustion, the source shall limit the NO<sub>x</sub> emissions as follows:

In order to make the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset) not applicable, the NO<sub>x</sub> emissions from the natural gas-fired steam generation boiler (emission unit B-1) shall be less than forty (40) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

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

The operation of the natural gas-fired steam generation boiler (emission unit B-1) will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

#### **326 IAC 2-6 (Emission Reporting)**

Since this source is located in Lake County, and has a potential to emit NO<sub>x</sub> and VOC greater than or equal to twenty-five (25) tons per year, an emission statement covering the previous calendar year must be submitted by July 1 of each year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

#### **326 IAC 3-5 (Continuous Monitoring of Emissions)**

The requirements of 326 IAC 3-5 are applicable to the natural gas-fired steam generation boiler (emission unit B-1) because pursuant to 326 IAC 3-5-1(b)(1) and (2), emission unit B-1 is required to perform continuous monitoring under 326 IAC 12, which incorporates by reference the requirements of 40 CFR 60 and it is a fossil fuel-fired steam generator of greater than 100 MMBtu/hr heat input capacity.

Pursuant to 326 IAC 3-5-1(c)(2)(C) and (D), the Permittee shall monitor NO<sub>x</sub> and the percent CO<sub>2</sub> or O<sub>2</sub>. *Note: the Permittee is not required to monitor opacity because gaseous fuel will be the only fuel combusted and the Permittee is not required to monitor SO<sub>2</sub> because no SO<sub>2</sub> pollution control equipment will be installed and the Permittee is not required to monitor SO<sub>2</sub> pursuant to 326 IAC 12 or 326 IAC 2.*

#### **326 IAC 5-1 (Opacity Limitations)**

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

- (a) Opacity shall not exceed an average of twenty percent (20%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### **326 IAC 6.8-1 (Particulate Matter Limitations for Lake County)**

Pursuant to 326 IAC 6.8-1-1(a)(2), the requirements of 326 IAC 6.8-1-2 are applicable to sources with a potential to emit PM of 100 tons or more per year or actual emissions of PM of 10 tons or more per year. U.S. Steel - East Chicago Tin Products does not have a potential to emit PM of greater than 100 tons per year. The source does have the potential to emit PM greater than 10 tons per year, so without limiting actual emissions, the requirements of 326 IAC 6.8-1-1(a)(2) are applicable to all facilities emitting particulate matter at U.S. Steel - East Chicago Tin Products.

Previously, it was assumed that actual emissions of particulate were less than ten (10) tons per year; therefore, particulate limits were established pursuant to 326 IAC 6-3-2 instead of 326 IAC 6.8-1. Actual particulate emissions have not exceeded ten (10) tons per year at this source, but there is the potential to exceed this threshold. Therefore, particulate limits at this source are being

re-evaluated pursuant to 326 IAC 6.8-1-2 in lieu of limiting the actual emissions to below ten (10) tons per year.

- (a) Pursuant to 326 IAC 6.8-1-2(b)(3), particulate matter emissions from the gaseous fuel-fired steam generator (emission unit B-1) shall not exceed 0.01 gr/dscf.
- (b) Pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions from facilities not limited by subsections 326 IAC 6.8-1-2(b) through (g) shall not exceed 0.03 gr/dscf.

The table below shows the PM limits, pursuant to 326 IAC 6.8-1-2 for emission units at U.S. Steel - East Chicago Tin Products, along with the calculated allowable PM emissions in lb/hr and the Uncontrolled PTE of PM.

| Emission Unit                | Air Flow (dscfm) | 326 IAC 6.8-1-2 PM Limit (gr/dscf) | Allowable PM Emissions <sup>(1)</sup> (lb/hr) | Uncontrolled PTE PM <sup>(2)</sup> (lb/hr) | Capable of Complying? |
|------------------------------|------------------|------------------------------------|---|--|-----------------------|
| Boiler B-1                   | 60,000           | 0.01                               | 5.14  | 1.5  | yes                   |
| Continuous Pickle Line       | 12,500           | 0.03                               | 3.21  | negligible                                 | yes                   |
| 6-Stand Cold Reduction Mill  | 160,000          | 0.03                               | 41.14   | 16.8                                       | yes                   |
| Continuous Annealing Line    | 12,000           | 0.03                               | 3.09  | 0.52                                       | yes                   |
| Tin Free Steel (Chrome) Line | 44,000           | 0.03                               | 11.31   | 1.48                                       | yes                   |
| Electrolytic Tinning Line    | 15,000           | 0.03                               | 3.86  | 0.38                                       | yes                   |
| Batch Annealing Operations   | 11,000           | 0.03                               | 2.83  | 0.59                                       | yes                   |
| 2-Stand Temper Mill          | 14,000           | 0.03                               | 3.60  | 2.33                                       | yes                   |
| Electrolytic Cleaning Line   | 15,000           | 0.03                               | 3.86  | negligible                                 | yes                   |

- (1) Allowable PM Emissions (lb/hr) = air flow (dscf/min) x 326 IAC 6.8-1-2 PM Limit (gr/dscf) x (60 min/hr) x (1 lb/7,000 gr)
- (2) Based on calculations from Appendix A of this TSD or Appendix A of the TSD to Part 70 Operating Permit Renewal No. T089-27328-00300, issued on October 22, 2009.

Based on the information above, as provided by the Permittee, U.S. Steel - East Chicago Tin Products is capable of complying with the 326 IAC 6.8-1-2 particulate emission limits without control devices.

**326 IAC 6.8-2 (Lake County PM10 Emission Requirements)**

The requirements of 326 IAC 6.8-2 are not applicable to U.S. Steel - East Chicago Tin Products because none of the sources, facilities or operations at U.S. Steel - East Chicago Tin Products are specifically listed in 326 IAC 6.8-2-3 through 326 IAC 6.8-2-38.

**326 IAC 6.8-10 (Lake County Fugitive Particulate Matter)**

U.S. Steel - East Chicago Tin Products is not subject to the provisions of 326 IAC 6.8-10 because it has the potential to emit of less than five (5) tons per year fugitive particulate matter into the atmosphere in Lake County.

**326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)**

Pursuant to 326 IAC 6-2-1(d), particulate emissions from the combustion of fuel for indirect heating from all facilities, receiving permits to construct on or after September 21, 1983, shall be limited by 326 IAC 6-2-4. However, pursuant to 326 IAC 6-2-1(e), if any limitation established by this rule is inconsistent with applicable limitations contained in 326 IAC 6.8, then the limitations contained in 326 IAC 6.8 prevail.

Pursuant to 326 IAC 6-2-4(a), particulate emissions from indirect heating facilities constructed after September 21, 1983 shall be limited by the following equation:

$$P_t = \frac{1.09}{Q^{0.26}}$$

Where:  $P_t$  = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.

$Q$  = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

For  $Q$  less than 10 MMBtu/hr,  $P_t$  shall not exceed 0.6 lb/MMBtu. For  $Q$  greater than or equal to 10,000 MMBtu/hr,  $P_t$  shall not exceed 0.1 lb/MMBtu.

Therefore, pursuant to 326 IAC 6-2-4(a), the allowable particulate emissions for the natural gas-fired steam generation boiler (emission unit B-1) would be:

$$P_t = 1.09 / (181.8^{0.26}) = 0.28 \text{ lb/MMBtu}$$

This is inconsistent with the emission limit pursuant to 326 IAC 6.8-1-2 (0.01 gr/dscf, equivalent to 0.03 lb/MMBtu). Therefore, the emission limit established in 326 IAC 6.8 shall prevail.

**326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)**

326 IAC 6-3 establishes particulate emission limitations for particulate emissions from manufacturing processes. However, pursuant to 326 IAC 6-3-1(c)(3), 326 IAC 6-3 shall not apply if a particulate matter emission limitation established in 326 IAC 6.8 is more stringent than the particulate emission limitation established in 326 IAC 6-3.

Previously, it had been determined that the particulate emission limitations pursuant to 326 IAC 6.8-1-2 did not apply to facilities at U.S. Steel - East Chicago Tin Products because the actual particulate emissions did not exceed ten (10) tons per year. This source does have the potential to emit greater than ten (10) tons per year of particulate matter, so without limiting the potential to emit of PM to less than ten (10) tons per year, the source is subject to 326 IAC 6.8-1 as discussed previously in this section of the TSD.

The table below provides a comparison of the particulate limits pursuant to 326 IAC 6-3-2 and 326 IAC 6.8-1-2:

| Emission Unit                | Process Weight Rate (ton/hr) | 326 IAC 6-3-2 Allowable PM Emissions <sup>(1)</sup> (lb/hr) | 326 IAC 6.8-1-2 Allowable PM Emissions <sup>(2)</sup> (lb/hr) |
|------------------------------|------------------------------|---|---|
| Continuous Pickle Line       | 160                          | 56.12   | 3.21  |
| 6-Stand Cold Reduction Mill  | 120                          | 53.13   | 41.14   |
| Continuous Annealing Line    | 56                           | 45.64   | 3.09  |
| Tin Free Steel (Chrome) Line | 33.7                         | 40.98   | 11.31   |
| Electrolytic Tinning Line    | 48.5                         | 44.29   | 3.86  |
| Batch Annealing Operations   | 48.5                         | 44.29   | 2.83  |
| 2-Stand Temper Mill          | 48.5                         | 44.29   | 3.60  |
| Electrolytic Cleaning Line   | 48.5                         | 44.29   | 3.86  |

(1) The 326 IAC 6-3-2 pound per hour limitations were calculated from the following equation:

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

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

- (2) The 326 IAC 6.8-1-2 pound per hour limitations were calculated as shown previously in this TSD.

Based on the above comparison, the particulate emission limits established pursuant to 326 IAC 6.8-1-2 are more stringent than those established pursuant to 326 IAC 6-3-2. Therefore, 326 IAC 6-3 shall not apply.

### **326 IAC 8-1-6 (New Facilities: General Reduction Requirements)**

The provisions of 326 IAC 8-1-6 (state VOC BACT) are applicable to new facilities, as of January 1, 1980, that have potential VOC emissions of twenty-five (25) tons or more per year and are not otherwise regulated by another provision under 326 IAC 8, 326 IAC 20-48, or 326 IAC 20-56. The proposed natural gas-fired steam generation boiler (emission unit B-1) has potential VOC emissions less than twenty-five (25) tons per year; therefore, the provisions of 326 IAC 8-1-6 are not applicable to emission unit B-1.

### **326 IAC 9 (Carbon Monoxide Emission Limits)**

The requirements of 326 IAC 9 are applicable to stationary sources of CO emissions, commencing operation after March 21, 1972, and that are subject to an emission limit in 326 IAC 9-1-2 for petroleum refining emissions, ferrous metal smelters, or refuse incineration and refuse burning equipment. The proposed natural gas-fired steam generation boiler (emission unit B-1) is not subject to an emission limit in 326 IAC 9-1-2; therefore, the provisions of 326 IAC 9 are not applicable to emission unit B-1.

### **326 IAC 10 (Nitrogen Oxide Rules)**

- (a) The provisions of 326 IAC 10-1 are not applicable to the proposed natural gas-fired steam generation boiler (emission unit B-1) because the facility is not located in Clark or Floyd Counties.
- (b) The provisions of 326 IAC 10-3 are not applicable to the proposed natural gas-fired steam generation boiler (emission unit B-1) because it is not a Portland cement kiln or a specifically listed boiler.
- (c) The provisions of 326 IAC 10-4 are not applicable to the proposed natural gas-fired steam generation boiler (emission unit B-1) because it does not meet the definition of an electricity generating unit or a large affected unit.

## **Compliance Determination and Monitoring Requirements**

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

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance

Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The following compliance determination requirements are applicable to the natural gas-fired steam generation boiler (emission unit B-1):

Maintenance of Continuous Emission Monitoring Equipment

- (a) Pursuant to 326 IAC 3-5-1(b)(1) and (2) and in order to determine compliance with Condition D.7.2, within one hundred eighty (180) days of startup of emission unit B-1, the Permittee shall install, calibrate, maintain, operate, and certify a continuous emission monitoring system (CEMS) and related equipment for measuring NOx emissions from emission unit B-1 in accordance with 326 IAC 3-5 and 40 CFR 60, Subpart Db.
- (b) The NOx CEMS shall be operated at all times emission unit B-1 is in operation except for system breakdowns, repairs, calibration checks, and zero and span adjustments.
- (c) Whenever the NOx CEMS is down for more than twenty-four (24) hours, the Permittee shall follow best combustion practices to minimize NOx emissions until the CEMS is brought back online.
- (d) Nothing in the permit shall excuse the Permittee from complying with the requirements to operate a CEMS pursuant to 40 CFR 60.

These compliance determination requirements are required to ensure compliance with 326 IAC 3-5 and to ensure that the NOx emissions from emission unit B-1 remain less than forty (40) tons per year to render 326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset) not applicable for this modification.

There are no new compliance monitoring requirements due to the proposed modification.

|                         |
|-------------------------|
| <b>Proposed Changes</b> |
|-------------------------|

The changes listed below have been made to Part 70 Operating Permit Renewal No. T089-27328-00300. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

**Change No. 1:**

The Source Status in Section A.1 of the permit has been revised to indicate that the source is a Major Source under PSD and Emission Offset, since after issuance of this permit, the potential to emit VOC, CO, and NOx will exceed the applicable major source thresholds. The permit has 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 tin mill.

|                              |   |
|------------------------------|---|
| Source Address:              | 101 East 129th Street, East Chicago, Indiana 46312  |
| Mailing Address:             | One North Broadway, Mail Station 70A, East Chicago, IN 46312  |
| General Source Phone Number: | 219-888-6995  |
| SIC Code:                    | 3313 and 3316   |
| County Location:             | Lake  |
| Source Location Status:      | Nonattainment for 8-hour ozone standard<br>Nonattainment for PM2.5 standard<br>Attainment for all other criteria pollutants |

Source Status: Part 70 Operating Permit Program  
~~Minor~~ Major Source, under PSD and Emission Offset  
and Nonattainment New Source Review Rules  
Major Source, **under** Section 112 of the Clean Air Act  
1 of 28 Source Categories

**Change No. 2:**

IDEM, OAQ is revising Section B - Emergency Provisions, to remove condition (h) for consistency in the Emergency Provisions Rule, because the deviation provisions in the Title V rules do not require a source that has already reported an emergency under paragraph (b)(5), emergencies lasting more than one hour, to include the same emergency in the deviation report. The permit has been revised as follows:

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

---

- (a) \* \* \*
- (b) \* \* \*
- (c) \* \* \*
- (d) \* \* \*
- (e) \* \* \*
- (f) \* \* \*
- (g) \* \* \*

~~(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report. Any emergencies that have been previously reported pursuant to paragraph (b) (5) of this condition and certified by an "responsible official" need only referenced by the date of the original report.~~

**Change No. 3:**

IDEM, OAQ has determined that U.S. Steel - East Chicago Tin Products is subject to the requirements of 326 IAC 6.8-1 instead of the requirements of 326 IAC 6-3-2 (see the State Rule Applicability Determination section for further discussion). Therefore, Condition C.1 - Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour has been removed from the permit and subsequent permit conditions have been renumbered as appropriate. The permit has been revised as follows:

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

---

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

**Change No. 4:**

A condition has been added to Section C of the permit for: Emergency Reduction Plans. The Permittee is required to submit Emergency Reduction Plans pursuant to 326 IAC 1-5-2 since it will

have the potential to emit 100 tons or more per year of NOx and CO. The permit has been revised as follows:

**C.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

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

within 180 days from the date on which this source commences operation.

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

(c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) 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]

**Change No. 5:**

Section C Conditions for General Record Keeping Requirements and General Reporting Requirements have been revised since U.S. Steel - East Chicago Tin Products is now considered a major source under PSD and Emission Offset. The permit has been revised as follows:

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

~~(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.~~

~~(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance or ninety (90) days of initial start-up, whichever is later.~~

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

---

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance or ninety (90) days of initial start-up, whichever is later.
- (c) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
- (1) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, document and maintain the following records:
- (A) A description of the project.
- (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
- (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
- (i) Baseline actual emissions;
- (ii) Projected actual emissions;
- (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(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.
- (d) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

- (1) **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**
- (2) **Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.**

~~C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]~~

---

- ~~(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~
- ~~(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2254~~
- ~~(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.~~
- ~~(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~
- ~~(e) 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.~~

**C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]  
[326 IAC 2-2][326 IAC 2-3]**

---

- (a) **The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).**
- (b) **The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance 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 within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (f) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing 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).
- (g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:
- (1) The name, address, and telephone number of the major stationary source.
  - (2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.
  - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
  - (4) Any other information that the Permittee deems fit to include in this report.

Reports required in this part shall be submitted to:

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

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

**Change No. 6:**

IDEM, OAQ has determined that U.S. Steel - East Chicago Tin Products is subject to the requirements of 326 IAC 6.8-1 instead of the requirements of 326 IAC 6-3-2 (see the State Rule Applicability Determination section for further discussion). Therefore, Sections A.3, D.1 through D.6, and Section D.8 (formerly Section D.7) have been revised to update descriptive information and incorporate the particulate emission limitations pursuant to 326 IAC 6.8-1-2. The permit has been revised as follows:

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

---

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

- (a) Specifically regulated insignificant activities
- (1) \* \* \*
  - (2) \* \* \*
  - (3) The following equipment related to manufacturing activities not resulting in the emission of HAPs: Brazing, Cutting torches, Soldering, and Welding. [326 IAC ~~6-3-2~~6.8-1-2]
  - (4) 2- Stand Tin Temper Mill  
One (1) Temper mill (emission unit EC-TM) containing two (2) stands (EC-TM 0042), constructed in 1956 having a maximum capacity of 48.5 tons per hour. Emissions are controlled by a baghouse (EC-TM CD1) exhausting inside the building. The baghouse was installed to improve the quality of the coils processed through the Temper Mill. [326 IAC ~~6-3-2~~6.8-1-2]
  - (5) One (1) Electrolytic Cleaning line, (emission Unit EC-EC), constructed in 1956, having a maximum capacity of 48.5 tons per hour. The line consists of caustic cleaning tanks (EC-EC0010) and a brush scrubber (EC-EC0011). Emissions are controlled using a gas/fume washer (Rotoclone Type "N") (EC-EC CD1) exhausting through one (1) stack (S7B). [326 IAC ~~6-3-2~~326 IAC 6.8-1-2]
  - (6) RCCP Recoil and Inspection Line [326 IAC ~~6-3-2~~326 IAC 6.8-1-2]  
  
One (1) Recoil and Inspection Line RCCP (emission unit EC-RI) constructed in 1956, consisting of the following:
    - (A) One (1) Recoiler Unit (EC-RC) where coils are unwound for surface quality and edge alignment inspections and then recoiled for further processing or shipment to customers.
    - (B) One (1) Electrostatic Oiler, (emission unit EC-RI0040) with emissions exhausting to one (1) Stack (S7J).

~~D.1.1 Particulate [326 IAC 6-3-2]~~

---

~~Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the Pickle Line (S5A) shall not exceed 56.12 pounds per hour when operating at a process weight rate of 160 tons per hour.~~

~~The pound per hour limitation was calculated using the following equation:~~

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

~~$$E = 55.0 P^{0.44} - 40$$
 where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour~~

**D.1.1 Particulate [326 IAC 6.8-1-2]**

---

**Pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions from the Pickle Line (S5A) shall not exceed 0.03 grain per dry standard cubic foot.**

\* \* \* \* \*

~~D.2.1 Particulate [326 IAC 6-3-2]~~

---

~~Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the 6-Stand Tandem Mill shall not exceed 53.13 pounds per hour when operating at a process weight rate of 120 tons per hour.~~

~~The pound per hour limitation was calculated using the following equation:~~

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

~~$$E = 55.0 P^{0.44} - 40$$
 where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour~~

**D.2.1 Particulate [326 IAC 6.8-1-2]**

---

**Pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions from the 6-Stand Cold Reduction Tandem Mill shall not exceed 0.03 grain per dry standard cubic foot.**

\* \* \* \* \*

~~D.3.1 Particulate [326 IAC 6-3-2]~~

---

~~Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the Continuous Annealing Line shall not exceed 45.64 pounds per hour when operating at a process weight rate of 56 tons per hour.~~

~~The pound per hour limitation was calculated using the following equation:~~

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

~~$$E = 55.0 P^{0.44} - 40$$
 where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour~~

**D.3.1 Particulate [326 IAC 6.8-1-2]**

---

**Pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions from the Continuous Annealing Line shall not exceed 0.03 grain per dry standard cubic foot.**

\* \* \* \* \*

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

---

~~Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the Tin Free Steel Line (Chrome Line) shall not exceed 40.98 pounds per hour when operating at a process weight rate of 33.7 tons per hour.~~

~~The pound per hour limitation was calculated using the following equation:~~

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

~~$E = 55.0 P^{0.44} - 40$  where  $E =$  rate of emission in pounds per hour; and  
 $P =$  process weight rate in tons per hour~~

**D.4.1 Particulate [326 IAC 6.8-1-2]**

**Pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions from the Tin Free Steel Line (Chrome Line) shall not exceed 0.03 grain per dry standard cubic foot.**

\* \* \* \* \*

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

~~Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the Electrolytic Tinning Line (Tin Line) shall not exceed 44.29 pounds per hour when operating at a process weight rate of 48.5 tons per hour.~~

~~The pound per hour limitation was calculated using the following equation:~~

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

~~$E = 55.0 P^{0.44} - 40$  where  $E =$  rate of emission in pounds per hour; and  
 $P =$  process weight rate in tons per hour~~

**D.5.1 Particulate [326 IAC 6.8-1-2]**

**Pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions from the Electrolytic Tinning Line (Tin Line) shall not exceed 0.03 grain per dry standard cubic foot.**

\* \* \* \* \*

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

~~Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the Batch Annealing Operations shall not exceed 44.29 pounds per hour when operating at a process weight rate of 48.5 tons per hour.~~

~~The pound per hour limitation was calculated using the following equation:~~

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

~~$E = 55.0 P^{0.44} - 40$  where  $E =$  rate of emission in pounds per hour; and  
 $P =$  process weight rate in tons per hour~~

**D.6.1 Particulate [326 IAC 6.8-1-2]**

**Pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions from the Batch Annealing Operations shall not exceed 0.03 grain per dry standard cubic foot.**

\* \* \* \* \*

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

(a) Specifically regulated insignificant activities

(1) \* \* \*

(2) \* \* \*

(3) The following equipment related to manufacturing activities not resulting in the emission of HAPs: Brazing, Cutting torches, Soldering, and Welding. [326 IAC ~~6-3-2~~ **6.8-1-2**]

(4) 2- Stand Tin Temper Mill  
One (1) Temper mill (emission unit EC-TM) containing two (2) stands (EC-TM 0042), constructed in 1956 having a maximum capacity of 48.5 tons per hour. Emissions are controlled by a baghouse (EC-TM CD1) exhausting inside the building. The baghouse was installed to improve the quality of the coils processed through the Temper Mill. [326 IAC ~~6-3-2~~ **6.8-1-2**]

(5) One (1) Electrolytic Cleaning line, (emission Unit EC-EC), constructed in 1956, having a maximum capacity of 48.5 tons per hour. The line consists of caustic cleaning tanks (EC-EC0010) and a brush scrubber (EC-EC0011). Emissions are controlled using a gas/fume washer (Rotoclone Type "N") (EC-EC CD1) exhausting through one (1) stack (S7B). [326 IAC ~~6-3-2~~ **6.8-1-2**]

(6) RCCP Recoil and Inspection Line [326 IAC ~~6-3-2~~ **6.8-1-2**]

One (1) Recoil and Inspection Line RCCP (emission unit EC-RI) constructed in 1956, consisting of the following:

(A) One (1) Recoiler Unit (EC-RC) where coils are unwound for surface quality and edge alignment inspections and then recoiled for further processing or shipment to customers.

(B) One (1) Electrostatic Oiler, (emission unit EC-RI0040) with emissions exhausting to one (1) Stack (S7J).

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

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

D.7.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emissions rate from the 2-Stand Temper Mill, the Electrolytic Cleaning line, the RCCP Recoil and Inspection Line and the Brazing, Cutting torches, Soldering, and Welding shall not exceed the pounds per hour emission rate established as "E" in the following equation:

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

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

D.8.1 Particulate [326 IAC 6.8-1-2]

Pursuant to 326 IAC 6.8-1-2(a), particulate matter emissions from the 2-Stand Temper Mill, the Electrolytic Cleaning line, the RCCP Recoil and Inspection Line and the brazing, Cutting torches, Soldering, and Welding shall not exceed 0.03 grain per dry standard cubic foot.

**D.78.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]**

---

\* \* \*

**D.78.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-8]**

---

\* \* \*

**Change No. 7:**

References in Section E.1 have been updated to reflect the correct citations. The permit has been revised as follows:

**SECTION E.1 National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)][326 IAC ~~42-420-29~~][40 CFR 63, Subpart CCC]**

\* \* \*

**E.1.2 National Emission Standards for Hazardous Air Pollutants for Steel Pickling-HCl Process Facilities and Hydrochloric Acid Regeneration Plants [326 IAC ~~20-1-420-29~~] [40 CFR 63, Subpart CCC]**

---

The Permittee which engages in the steel pickling-HCl process shall comply with the following provisions of 40 CFR 63, Subpart CCC (included as Attachment A of this permit), with a compliance date of June 22, 2001:

- (1) 40 CFR 63.1155
- (2) 40 CFR 63.1156
- (3) 40 CFR 63.1157(a)
- (4) 40 CFR 63.1159(b)
- (5) 40 CFR 63.1160
- (6) 40 CFR 63.1161(a), (b) and (d)
- (7) 40 CFR 63.1162(a) and (c)
- (8) 40 CFR 63.1163
- (9) 40 CFR 63.1164
- (10) 40 CFR 63.1165
- (11) Table 1 to Subpart CCC of Part 63

**Modification No. 1:**

Section A.2 of the permit has been revised to include the emission unit description of the proposed boiler. The permit has been revised as follows:

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

---

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

- (a) \* \* \*
- (b) \* \* \*
- (c) \* \* \*
- (d) \* \* \*
- (e) \* \* \*
- (f) \* \* \*

**(g) Steam Generation**

- (1) One (1) natural gas-fired steam generation boiler (emission unit B-1), approved in 2010 for construction, with a maximum heat input capacity of 181.8 MMBtu/hr, using low NOx burners and flue gas recirculation, and exhausting through one (1) stack (SS-1).**

**Modification No. 2:**

Section D.7 has been used to incorporate the emission unit description and applicable requirements for the proposed boiler. The insignificant activities, formerly addressed under Section D.7 of the permit, have been moved to Section D.8 of the permit and permit conditions have been renumbered accordingly. The permit has been revised as follows:

**Section D.7 FACILITY OPERATION CONDITIONS**

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

**(g) Steam Generation**

- (1) One (1) natural gas-fired steam generation boiler (emission unit B-1), approved in 2010 for construction, with a maximum heat input capacity of 181.8 MMBtu/hr, using low NOx burners and flue gas recirculation, and exhausting through one (1) stack (SS-1).**

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

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

**D.7.1 Particulate Emissions [326 IAC 6.8-1-2]**

Pursuant to 326 IAC 6.8-1-2(b)(3), the particulate matter emissions from the natural gas-fired steam generation boiler (emission unit B-1) shall not exceed 0.01 grains per dry standard cubic foot when combusting natural gas.

**D.7.2 NOx PSD and Emission Offset Minor Limit [326 IAC 2-2] [326 IAC 2-3]**

Pursuant to SPM No. 089-28872-00300, in order to make the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset) not applicable, the NOx emissions from the natural gas-fired steam generation boiler (emission unit B-1) shall be less than forty (40) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

**D.7.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

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

**Compliance Determination Requirements**

**D.7.4 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 3-5] [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)(A)(iii)]**

- (a) Pursuant to 326 IAC 3-5-1(b)(1) and (2) and in order to determine compliance with Condition D.7.2, within one hundred eighty (180) days of startup of emission unit B-1, the Permittee shall install, calibrate, maintain, operate, and certify a continuous emission monitoring system (CEMS) and related equipment for measuring NOx emissions from emission unit B-1 in accordance with 326 IAC 3-5 and 40 CFR 60, Subpart Db.**

- (b) The NOx CEMS shall be operated at all times emission unit B-1 is in operation except for system breakdowns, repairs, calibration checks, and zero and span adjustments.
- (c) Whenever the NOx CEMS is down for more than twenty-four (24) hours, the Permittee shall follow best combustion practices to minimize NOx emissions until the CEMS is brought back online.
- (d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a CEMS pursuant to 40 CFR 60.

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

**D.7.5 Record Keeping Requirements**

- (a) To document compliance with Condition D.7.2, the Permittee shall maintain records of the NOx CEMS output. Records shall be complete and sufficient to establish compliance with the NOx limit in Condition D.7.2 on a monthly basis.
- (b) The Permittee shall perform the required record keeping pursuant to 326 IAC 3-5-4 and 326 IAC 3-5-6.
- (c) In the event that a breakdown of the NOx CEMS occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**D.7.6 Reporting Requirements**

- (a) In order to document compliance with Condition D.7.2, the Permittee shall submit a quarterly summary of the monthly NOx emissions to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require certification by the "responsible official" as defined by 326 IAC 2-71-(34).
- (b) The Permittee shall perform the required reporting pursuant to 326 IAC 3-5-4, 326 IAC 3-5-5, and 326 IAC 3-5-7.

**Modification No. 3:**

Section E.2 has been added to the permit to reference the applicable provisions of 40 CFR 60, Subpart Db for the proposed boiler. The entire rule has been included as Attachment B to the permit. The permit has been revised as follows:

**SECTION E.2 New Source Performance Standards for Industrial-Commercial-Institutional Steam Generating Units Requirements [326 IAC 2-7-5(1)][326 IAC 12][40 CFR 60, Subpart Db]**

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

**(g) Steam Generation**

- (1) One (1) natural gas-fired steam generation boiler (emission unit B-1), approved in 2010 for construction, with a maximum heat input capacity of 181.8 MMBtu/hr, using low NOx burners and flue gas recirculation, and exhausting through one (1) stack (SS-1).

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

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

The provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to the facilities described in this section except when otherwise specified in 40 CFR 60, Subpart Db.

**E.2.2 Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units [40 CFR 60, Subpart Db]**

Pursuant to 40 CFR Part 60, Subpart Db, the Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Db (included as Attachment B of this permit):

- (1) 40 CFR 60.40b(a)
- (2) 40 CFR 60.41b
- (3) 40 CFR 60.42b(k)(2)
- (4) 40 CFR 60.44b(a)(1), (h), (i)
- (5) 40 CFR 60.46b(a), (c), (e)
- (6) 40 CFR 60.48b(b)(1), (c), (d), (e)(2), (f)
- (7) 40 CFR 60.49b(a), (b), (d), (g), (h)(2), (i), (o), (r)(1), (v), (w)

**Modification No. 4:**

A quarterly reporting form has been included with the other reporting forms at the end of the permit for documenting compliance with the NOx emission limit in Condition D.7.2. The permit has been revised as follows:

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

**Part 70 Quarterly Report**

**Source Name:** U.S. Steel - East Chicago Tin Products  
**Source Address:** 101 East 129th Street, East Chicago, Indiana 46312  
**Mailing Address:** One North Broadway, Mail Station 70A, East Chicago, IN 46312  
**Part 70 Permit No.:** T089-27328-00300  
**Facility:** Emission Unit B-1  
**Parameter:** NOx emissions  
**Limit:** Shall be less than forty (40) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

**QUARTER :**

**YEAR:**

| Month | NOx Emissions (tons) | NOx Emissions (tons) | NOx Emissions (tons) |
|-------|----------------------|----------------------|----------------------|
|       | This Month           | Previous 11 Months   | 12 Month Total       |
|       |                      |                      |                      |

|                |  |  |  |
|----------------|--|--|--|
| <b>Month 1</b> |  |  |  |
| <b>Month 2</b> |  |  |  |
| <b>Month 3</b> |  |  |  |

No deviation occurred in this quarter.

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

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

**Attach a signed certification to complete this report.**

|                                      |
|--------------------------------------|
| <b>Conclusion and Recommendation</b> |
|--------------------------------------|

The construction and operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 089-28552-00300 and Significant Permit Modification No. 089-25572-00300, respectively. The staff recommend to the Commissioner that this Part 70 Significant Source Modification and Significant Permit Modification be approved.

**Appendix A: Emission Calculations**  
**Natural Gas Fired Boiler**  
**MMBTU/HR >100**

**Company Name:** U.S. Steel - East Chicago Tin Products  
**Address City IN Zip:** 101 E 129th St, East Chicago, IN 46312  
**Significant Source Modification No.:** 089-28852-00300  
**Significant Permit Modification No.:** 089-28872-00300  
**Reviewer:** Laura Spriggs

|                               |                                |                                | Pollutant                     |         |          |     |      |     |      |
|-------------------------------|--------------------------------|--------------------------------|-------------------------------|---------|----------|-----|------|-----|------|
|                               |                                |                                | PM***                         | PM10*** | PM2.5*** | SO2 | NOx  | VOC | CO   |
| Emission Factor in lb/MMCF*   |                                |                                | 1.9                           | 7.6     | 7.6      | 0.6 |      | 5.5 | 84.0 |
| Emission Factor in lb/MMBtu** |                                |                                |                               |         |          |     | 0.05 |     |      |
| Emissions Unit                | Heat Input Capacity (MMBtu/hr) | Potential Throughput (MMCF/yr) | Potential Emission in tons/yr |         |          |     |      |     |      |
| Boiler B-1                    | 181.8                          | 1561.341                       | 1.5                           | 5.9     | 5.9      | 0.5 | 39.8 | 4.3 | 65.6 |

\*Emission Factors from AP-42, Chapter 1.4, Tables 1.4-1 and 1.4-2, SCC #1-01/02/03-006-01 (AP-42, Supplement D, 7/98)

\*\*The boiler manufacturer provided a guarantee of 0.036 lb/MMBtu for NOx. An emission factor of 0.05 lb/MMBtu is being used to provide for a factor of safety. The Permittee shall limit NOx emissions to less than 40 tons per 12 consecutive month period, with compliance determined at the end of each month through the use of a NOx CEMS.

\*\*\*PM is filterable PM only. PM10 is filterable and condensable PM. PM2.5 is assumed to equal PM10.

|                            |                                |                                | HAPs - Organics               |                 |              |         |         |
|----------------------------|--------------------------------|--------------------------------|-------------------------------|-----------------|--------------|---------|---------|
|                            |                                |                                | Benzene                       | Dichlorobenzene | Formaldehyde | Hexane  | Toluene |
| Emission Factor in lb/MMCF |                                |                                | 2.1E-03                       | 1.2E-03         | 7.5E-02      | 1.8E+00 | 3.4E-03 |
| Emissions Unit             | Heat Input Capacity (MMBtu/hr) | Potential Throughput (MMCF/yr) | Potential Emissions (tons/yr) |                 |              |         |         |
| Boiler B-1                 | 181.8                          | 1561.341                       | 1.6E-03                       | 9.4E-04         | 5.9E-02      | 1.4E+00 | 2.7E-03 |

|                            |                                |                                | HAPs - Metals                 |         |          |           |         | Total HAPs<br>(Organics+Metals) |
|----------------------------|--------------------------------|--------------------------------|-------------------------------|---------|----------|-----------|---------|---------------------------------|
|                            |                                |                                | Lead                          | Cadmium | Chromium | Manganese | Nickel  |                                 |
| Emission Factor in lb/MMCF |                                |                                | 5.0E-04                       | 1.1E-03 | 1.4E-03  | 3.8E-04   | 2.1E-03 |                                 |
| Emissions Unit             | Heat Input Capacity (MMBtu/hr) | Potential Throughput (MMCF/yr) | Potential Emissions (tons/yr) |         |          |           |         |                                 |
| Boiler B-1                 | 181.8                          | 1561.341                       | 3.9E-04                       | 8.6E-04 | 1.1E-03  | 3.0E-04   | 1.6E-03 | 5.4E-02                         |

Emission Factors from AP-42, Chapter 1.4, Tables 1.4-3 and 1.4-4 (AP-42, Supplement D, 7/98)

The five highest organic and metal HAPs emission factors are provided above. Additional HAP emission factors are available in AP-42, Chapter 1.4.

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) \* (8,760 hrs/yr) \* (1 MMCF/1,020 MMBtu)

Emission (tons/yr) = Throughput (MMCF/yr) \* Emission Factor (lb/MMCF) \* (1 ton/2,000 lb)

Emissions (tons/yr) = Throughput (MMBtu/hr) \* Emission Factor (lb/MMBtu) \* (1 ton/2,000 lb) \* (8,760 hrs/yr)



# 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:** Jim Alexander  
U.S. Steel - East Chicago Tin Products  
One N Broadway MS 70A  
Gary, IN 46402

**DATE:** March 24, 2010

**FROM:** Matt Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

**SUBJECT:** Final Decision  
Part 70 - SSM  
089-28852-00300

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:  
William R Donovan  
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

*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)

March 24, 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: U.S. Steel - East Chicago Tin Products**  
**Permit Number: 089-28852-00300**

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

*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: March 24, 2010

RE: U.S. Steel - East Chicago Tin Products / 089-28852-00300

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 3/24/2010<br>U.S. Steel - East Chicago Tin Products 089-28852-00300 (final) |   | AFFIX STAMP<br>HERE IF<br>USED AS<br>CERTIFICATE<br>OF MAILING |  |
| Name and address of Sender |   | Indiana Department of Environmental Management<br>Office of Air Quality – Permits Branch<br>100 N. Senate<br>Indianapolis, IN 46204 | Type of Mail:<br><br><b>CERTIFICATE OF MAILING ONLY</b>        |  |

| 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    |                | Jim Alexander U.S. Steel - East Chicago Tin Products One N Broadway MS 70A Gary IN 46402 (Source CAATS)                         |         |                 |                            |               |                 |          |          |          |                |         |
| 2    |                | William R Donovan Division Mgr U.S. Steel - East Chicago Tin Products 101 E 129th St East Chicago IN 46312 (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   |                | Ms. Kathy Luther Northern Regional Planning Commission 6100 Southport Rd Portage IN 46368 (Affected Party)                      |         |                 |                            |               |                 |          |          |          |                |         |
| 14   |                | Craig Hogarth 7901 West Morris Street Indianapolis IN 46231 (Affected Party)  |         |                 |                            |               |                 |          |          |          |                |         |
| 15   |                | Lake County Commissioners 2293 N. Main St, Building A 3rd Floor Crown Point IN 46307 (Local Official)                           |         |                 |                            |               |                 |          |          |          |                |         |

|   |  |  |  |
|---|--|--|--|
| 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. |
|---|--|--|--|

# Mail Code 61-53

|                            |  |   |  |  |
|----------------------------|--|---|--|--|
| IDEM Staff                 | CDENNY 3/24/2010<br>U.S. Steel - East Chicago Tin Products 089-28852-00300 (final) |   | AFFIX STAMP<br>HERE IF<br>USED AS<br>CERTIFICATE<br>OF MAILING |  |
| Name and address of Sender |   | Indiana Department of Environmental Management<br>Office of Air Quality – Permits Branch<br>100 N. Senate<br>Indianapolis, IN 46204 | Type of Mail:<br><br><b>CERTIFICATE OF MAILING ONLY</b>        |  |

| 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    |                | Anthony 2006 E. 140th Street East Chicago IN 46312 (Affected Party)          |         |                 |                            |               |                 |          |          |          |                |
| 2    |                | Barbara G. Perez 506 Lilac Street East Chicago IN 46312 (Affected Party)     |         |                 |                            |               |                 |          |          |          |                |
| 3    |                | Mr. Robert Garcia 3733 Parrish Avenue East Chicago IN 46312 (Affected Party) |         |                 |                            |               |                 |          |          |          |                |
| 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. |
|---|--|--|--|