



# 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)

## NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding a  
Significant Source Modification to a  
Part 70 Operating Permit

for AK Steel Corporation, Rockport Works in Spencer County

Significant Source Modification No. 147-28771-00041  
Significant Permit Modification No. 147-28980-00041

The Indiana Department of Environmental Management (IDEM) has received an application from AK Steel Corporation, Rockport Works, located at 6500 US 231 North, Rockport, Indiana for a significant modification of their Part 70 Operating Permit issued on September 1, 2006. If approved by IDEM's Office of Air Quality (OAQ), this proposed modification would allow AK Steel Corporation, Rockport Works to make certain changes at their existing source. AK Steel Corporation, Rockport Works, has applied to construct and operate three (3) 6.75 MMBtu hydrogen batch annealing furnaces.

The applicant intends to construct and operate new equipment that will emit air pollutants; therefore the permit contains new or different permit conditions. In addition, some conditions from previously issued permits/approvals have been corrected, changed or removed. These corrections, changes, and removals may include Title I changes (ex changes that add or modify synthetic minor emission limits). IDEM has reviewed this application, and has developed preliminary findings, consisting of a draft permit and several supporting documents, that would allow the applicant to make this change.

IDEM is aware that the three (3) 6.75 MMBtu hydrogen batch annealing furnaces have been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take appropriate action. This draft significant source modification and significant permit modification contains provisions to bring unpermitted equipment into compliance with construction and operation permit rules.

A copy of the permit application and IDEM's preliminary findings are available at:

Spencer County Public Library  
210 Walnut Street Broadway  
Rockport, IN 47635-1398

Southwest Regional Office  
1120 N. Vincennes Avenue  
P.O. Box 128  
Petersburg, IN 47567-0128

Southeast Regional Office  
820 West Sweet Street  
Brownstown, IN 47220-9557

A copy of the preliminary findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>.

### How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30<sup>th</sup> day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing,

IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit numbers 147-28771-00041 and 147-28980-00041 in all correspondence.

**Comments should be sent to:**

Laura Spriggs  
IDEM, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
(800) 451-6027, ask for extension (3-5693)  
Or dial directly: (317) 233-5693  
Fax: (317)-232-6749 attn: Laura Spriggs  
E-mail: [lspriggs@idem.in.gov](mailto:lspriggs@idem.in.gov)

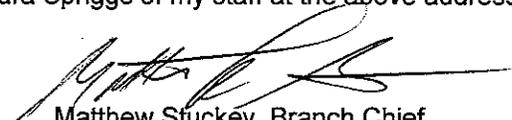
All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor or noise. For such issues, please contact your local officials.

For additional information about air permits and how you can participate, please see IDEM's **Guide for Citizen Participation** and **Permit Guide** on the Internet at: [www.idem.in.gov](http://www.idem.in.gov).

**What will happen after IDEM makes a decision?**

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, and the IDEM public file room on the 12<sup>th</sup> floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251, and at the regional offices indicated above.

If you have any questions please contact Laura Spriggs of my staff at the above address.

  
Matthew Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

MS/lss



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## DRAFT

Mr. Ron Mundel  
AK Steel Corporation, Rockport Works  
6500 U.S. 231 North  
Rockport, IN 47635

Re: 147-28771-00041  
PSD/Source Modification to  
Part 70 No.: T147-11043-00041

Dear Mr. Mundel:

AK Steel Corporation, Rockport Works was issued Part 70 Operating Permit T147-11043-00041 on September 1, 2006 for a stationary steel coil finishing plant with ancillary equipment. An application to modify the source was received on December 21, 2009. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

- (a) One (1) hydrogen batch annealing furnace, installed in February 1999, permitted in 2011, with a maximum heat input capacity of 6.75 MMBtu/hr, using low NO<sub>x</sub> burners as control, and exhausting through the roof vent system in building 500.
- (b) Two (2) hydrogen batch annealing furnaces, installed in February 2000, permitted in 2011, with a maximum heat input capacity of 6.75 MMBtu/hr each, using low NO<sub>x</sub> burners as control, and exhausting through the roof vent system in building 500.

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.

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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.

For your convenience, the entire Part 70 Operating Permit as modified is attached.

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,

Matthew Stuckey, Chief  
Permits Branch  
Office of Air Quality

Attachments:

MS/lss

cc: File – Spencer County  
Spencer County Health Department  
U.S. EPA, Region V  
IDEM Southwest Regional Office  
IDEM Southeast Regional Office  
Compliance and Enforcement Branch



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**Part 70 PSD/Significant Source Modification  
OFFICE OF AIR QUALITY**

**AK Steel Corporation, Rockport Works  
6500 North US 231  
Rockport, Indiana 47635**

**and two on-site contractors:**

**Air Liquide Industrial, U.S.L.P.  
6500 North US Route 231  
Rockport, Indiana 47635**

**and**

**Precision Strip, Inc.  
6500 North US Route 231  
Rockport, Indiana 47635**

(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 2-2 and 326 IAC 2-7-10.5, applicable to those conditions.

PSD/Significant Source Modification No.: 147-28771-00041	
Issued by:  Matthew Stuckey, Chief Permits Branch Office of Air Quality	Issuance Date:

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**AK Steel**

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## **Air Liquide Industrial, U.S.L.P**

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## **Precision Strip, Inc.**

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## **E.2. EMISSIONS UNIT OPERATION CONDITIONS - NSPS, Subpart Kb**

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- E.2.1 General Provisions Relating to NSPS, Subpart Kb [40 CFR Part 60, Subpart A] [326 IAC 12-1]
- E.2.2 New Source Performance Standards for Volatile Organic Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984: Requirements [40 CFR Part 60, Subpart Kb] [326 IAC 12]

## **E.3. EMISSIONS UNIT OPERATION CONDITIONS - NSPS, Subpart Dc**

### **New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units - 40 CFR Part 60, Subpart Dc [326 IAC 12]**

- E.3.1 General Provisions Relating to NSPS, Subpart Dc [326 IAC 12-1] [40 CFR Part 60, Subpart A]
- E.3.2 New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units [40 CFR Part 60, Subpart Dc] [326 IAC 12]

Certification

Emergency Occurrence Report

Chromium Electroplating and Anodizing NESHAP Ongoing Compliance Status Report

Quarterly Deviation and Compliance Monitoring Report

Attachment A: 40 CFR 63, Subpart N – National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks

Attachment B: 40 CFR 60, Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984

Attachment C: 40 CFR 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

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## SECTION A

## SOURCE SUMMARY

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

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

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The Permittee owns and operates a stationary steel coil finishing plant with ancillary equipment.

Source Address:	6500 North US 231, Rockport, Indiana 47635
General Source Phone Number:	(812) 362-6125
SIC Code:	3312
County Location:	Spencer
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Rules Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

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

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This stationary source consists of three (3) companies: one (1) primary source, and two (2) on-site contractors. The primary source is:

AK Steel Corporation (147-00041), a steel coil finishing operation, located at 6500 North U.S. 231, Rockport, Indiana, 47635.

The two on-site contractors are:

- (a) Air Liquide Industrial, U.S.L.P. (formerly MG Industries) (147-00049), an industrial gas production operation located inside the AK Steel plant, at 6500 North US Route 231, Rockport, Indiana 47635; and
- (b) Precision Strip, Inc. (147-00051), a slitting operation located inside the AK Steel plant, at 6500 North US Route 231, Rockport, Indiana 47635.

One document for the Part 70 operating permit will be issued to AK Steel. The requirements for Air Liquide Industrial, U.S.L.P. and Precision Strip, Inc., are included in this permit.

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

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

#### AK STEEL

- (a) A Continuous Anneal and Pickling Line (APL) with a maximum normal capacity of 130 tons per hour consisting of:
  - (1) one (1) flattener,

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- (2) one (1) shear,
  - (3) one (1) laser welder,
  - (4) one (1) leveller shear,
  - (5) one (1) alkaline cleaner section exhausting through a wet scrubber system to Stack S06,
  - (6) one (1) 110.0 MMBtu/hr natural gas-fired annealing furnace section equipped with low-NOx burners with integral exhaust gas recirculation (or equivalent) exhausting to Stack S07A,
  - (7) one (1) 55.0 MMBtu/hr natural gas-fired annealing furnace section equipped with low-NOx burners with integral exhaust gas recirculation (or equivalent) exhausting to Stack S07B,
  - (8) one (1) air quench station consisting of 10 sections exhausting through a baghouse to Stack S08,
  - (9) one (1) water quench sections,
  - (10) one (1) cooling tower with 1650 gallons per minute recirculating capacity,
  - (11) one (1) enclosed shot blasting chamber exhausting through a baghouse to Stack S05,
  - (12) electrolytic pickle and rinse tanks exhausting through a wet scrubber system to Stack S09A,
  - (13) mixed acids pickle and rinse tanks exhausting through a multi-stage oxidation/reduction and acid neutralization scrubbing system to Stack S09B,
  - (14) one (1) steam heated strip dryer,
  - (15) skin pass temper mill and roll cleaning dust collection system exhausting through individual baghouses to Stack S09C, and
  - (16) one (1) tension/leveller and side trimmer.
- (b) A Continuous Pickling Line (CPL) with a maximum normal capacity of 476 tons per hour consisting of:
- (1) one (1) strip leveller and one (1) mechanical scale breaker exhausting through a baghouse to Stack S01,
  - (2) one (1) laser welder and one (1) tension leveller,
  - (3) three (3) HCl (Hydrochloric) acid pickle and rinse tanks;
    - (A) when processing carbon steel only: three (3) HCl acid pickle and rinse tanks exhausting through a wet scrubber system to Stack S02;
    - (B) when processing stainless steels only: three (3) HCl acid pickle tanks exhausting through a wet scrubber system to Stack S02; mixed acid and rinse tanks exhausting through a wet scrubber system Stack S02, through the electrolytic pickle scrubber system on the APL to Stack S09A, and exhausting through the multi-stage oxidation/reduction and acid neutralization scrubbing system on the APL at Stack S09B.
  - (4) one (1) steam heated pickle dryer,
  - (5) one (1) shear/trimmer, and
  - (6) one (1) CPL electrostatic oiler.
- (c) A Continuous Cold Mill (CCM) with a maximum normal capacity of 660 tons per hour consisting of:
- (1) one (1) strip leveller and one (1) shear,
  - (2) one (1) laser welder,
  - (3) five (5) cold reduction mills exhausting through one (1) mist elimination system to Stack S11; and

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- (4) one (1) cold mill rotary shear and tension reels.
- (d) One (1) Temper Mill with a maximum capacity of 300 tons per hour exhausting through one (1) oil mist elimination system to Stack S16.
- (e) A Continuous Galvanizing Line (CGL) with a maximum normal capacity of 183.6 tons per hour consisting of:
  - (1) one (1) flattener,
  - (2) one (1) mash seam welder,
  - (3) alkaline cleaning system exhausting through a wet scrubber system to Stack S17,
  - (4) one (1) 4.1 MMBtu/hr natural gas-fired cleaning section dryer,
  - (5) one (1) 205.7 MMBtu/hr annealing furnace with a continuous emissions monitor (CEM) and controlled by a selective catalytic reduction (SCR) system exhausting to Stack S18,
  - (6) one (1) 7.0 MMBtu/hr natural gas-fired back-up galvanneal soak section burner,
  - (7) one (1) 2.05 MMBtu/hr natural gas-fired preheater for the zinc pot equipment,
  - (8) one (1) induction zinc premelt pot,
  - (9) one (1) induction heated zinc coating pot,
  - (10) one (1) 0.82 MMBtu/hr natural gas-fired edge burner,
  - (11) one (1) water quench cooling section with a closed loop, recirculating water spray,
  - (12) one (1) 4.1 MMBtu/hr natural gas-fired dryer,
  - (13) one (1) skin pass temper mill and one (1) tension leveller,
  - (14) one (1) chromate application system with one (1) roll coater,
  - (15) one (1) 6.0 MMBtu/hr natural gas-fired dryer,
  - (16) one (1) phosphate application system with one (1) roll coater,
  - (17) one (1) 5.68 MMBtu/hr natural gas-fired dryer,
  - (18) one (1) CGL electrostatic oiler, and
  - (19) one (1) rotary shear.
- (f) A Roll Repair Shop consisting of:
  - (1) Two (2) electrolytic chrome dip tanks, identified as 1 East and 1 West constructed in 1998, rated at 36 tons per hour steel rolls each, or 5.5 gallons per hour chromium solution, with both exhausting through a composite mesh pad mist elimination system to Stack S15.
  - (2) One (1) electrodischarge texturing machine exhausting through a baghouse to the interior of the building.
  - (3) One (1) chrome purification tank, identified as CrPur-12, approved for construction in 2008, with a maximum capacity of 4,204,800 A-hrs/yr, using a mesh pad mist elimination system as control, and exhausting to stack S15.
- (g) Ancillary Equipment, as listed is;
  - (1) Hydrogen batch annealing operations, constructed in 1999 and 2000, with emissions exhausting through the roof vent system in building 500, including:
    - (A) Fifteen (15) natural gas-fired furnaces with low NOx burners, identified as hydrogen batch annealing furnaces Nos. 1-15, each with a maximum heat input capacity of 6.75 MMBtu/hr.;

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- (B) Three (3) natural gas-fired furnaces with low NO<sub>x</sub> burners, identified as hydrogen batch annealing furnaces Nos. 16-18, permitted in 2011, each with a maximum heat input capacity of 6.75 MMBtu/hr.
- (2) Space heaters and air make-up units with each unit limited to no more than 5.2 MMBtu/hr and a combined rating limited to no more than 251 MMBtu/hr;
- (3) Two (2) non-contact cooling towers with mist drift eliminators exhausting to the atmosphere;
- (4) Storage tanks for HCl acid, nitric acid, and HF (Hydrofluoric) acid exhausting through a fume scrubber to Stack S04 consisting of:
  - (A) One (1) HF acid tank with a capacity of 20,000 gallons;
  - (B) One (1) nitric acid tank with a capacity of 20,000 gallons;
  - (C) Three (3) waste acid tanks, each with a capacity of 40,000 gallons, or 120,000 gallons combined;
  - (D) Three (3) HCL/ra acid tanks, each with a capacity of 40,000 gallons, or 120,000 gallons combined; and
  - (E) Two (2) CPL waste acid tanks, each with a capacity of 40,000 gallons, or 80,000 gallons combined.
- (5) Miscellaneous storage tanks at the continuous cold mill (CCM) operation not to exceed an overall capacity of 353,000 gallons, consisting of:
  - (A) Two (2) Morgoil System 2 tanks, No.1 and No.2, each with a capacity of 18,500 gallons, or 37,000 gallons combined;
  - (B) One (1) CCM gear lube tank, with a capacity of 13,500 gallons;
  - (C) One (1) base oil storage tank, with a capacity of 10,000 gallons;
  - (D) One (1) direct oil tank, with a capacity of 4,000 gallons;
  - (E) Two (2) Emulsion tanks, No.1 and No.2, each with a capacity of 88,000 gallons, or 176,000 gallons combined; and
  - (F) Two (2) Emulsion tanks, No.3 and No.4, each with a capacity of 44,000 gallons, or 88,000 gallons combined.
- (6) Miscellaneous storage tanks at the temper mill operation not to exceed an overall capacity of 131,000 gallons, consisting of:
  - (A) One (1) direct oil application tank, with a capacity of 4,000 gallons;
  - (B) Three (3) temper mill tanks, TM1-UZ203, LSL-01, 02, and 03, each with a capacity of 10,000 gallons, or 30,000 gallons combined;
  - (C) One (1) base oil tank, with a capacity of 8,000 gallons;
  - (D) One (1) solution tank, with a capacity of 3,200 gallons;

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- (E) One (1) gear lube tank, TM-1-P-2084, with a capacity of 2,100 gallons;  
and
- (F) Two (2) Morgoil tanks, TM-1-P-2000 and 99, each with a capacity of 5,300 gallons, or 10,600 gallons combined.
- (7) Miscellaneous oil storage tanks for the continuous galvanizing line (CGL) not to exceed an overall capacity of 16,250 gallons, consisting of:
  - (A) One (1) tank, GL1-PGOL-TNK-01, with a capacity of 6,000 gallons; and
  - (B) Three (3) tanks, GL1-PGOL-TNK-02, 03, and 04, each with a capacity of 3,000 gallons, or 9,000 gallons combined.
- (8) A miscellaneous oil storage tank for the continuous pickling line (CPL), consisting of one (1) CPL pickling tank, with a capacity of 15,000 gallons.
- (h) Rolling oils, rust preventative oils, and prelube oils.
- (i) Process boilers consisting of:
  - (1) North Boilers: Two (2) natural gas-fired boilers with ultra low-NOx burners, constructed in 1998, each rated at 76.0 MMBtu/hr heat input, exhausting to Stack S03.
  - (2) South Boilers: Two (2) natural gas-fired boilers with ultra low-NOx burners, constructed in 1998, each rated at 76.0 MMBtu/hr heat input, exhausting to Stack S20.

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

- (a) This stationary source also includes the following insignificant activities, operated by AK Steel, as defined in 326 IAC 2-7-1(21):
  - (1) Emissions from a laboratory as defined in this clause.
    - (A) Three (3) chemical – process testing laboratories: one each at the APL, CPL, and Roll Shop.
    - (B) One (1) process sample testing laboratory located at the WWTP (Waste Water Treatment Plant).
    - (C) One (1) process sample testing laboratory located at the Fluids Manager complex.
    - (D) One (1) steel sample physical laboratory and fume hood located in the CGL.
  - (2) Fuel dispensing activities, including the following:
    - (A) One (1) gasoline fuel transfer dispensing operation, handling less than 1,300 gal/day, with storage tank capacity of 1,100 gallons.
    - (B) One (1) petroleum fuel other than gasoline dispensing operation, handling less than 3,500 gal/day, with storage tank capacity of 1,100 gallons.
  - (3) Production related activities, including the following:

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- (A) Four (4) roll grinders, wherein cutting coolant continuously floods the machining interface, located in the roll repair shop.
  - (B) One (1) soapy water bearing washer/degreasing operation with a capacity of approximately 50 gallons, located in the roll repair shop.
  - (C) One (1) waste water treatment plant for treatment of process waste water.
- (4) Activities associated with the following recovery systems: four (4) rolling oil circulation and recovery systems, located in the CCM Emulsion Room.
- (5) Repair activities, including the following:
- (A) Repair of baghouses, mist eliminators and scrubbers.
  - (B) Cleaning of APL cooling tower.
  - (C) Changeover from carbon to stainless and vice versa at the CPL.
- (6) Flue gas conditioning systems and associated chemicals, such as the following: Ammonia is used in the deNOx system on the CGL Annealing Furnace.
- (7) Blowdown for the following:
- (A) Four (4) natural gas-fired boilers, listed in Section D.8, are equipped with automatic blowdown.
  - (B) Four (4) cooling towers, listed as ancillary equipment or in specific processes, are equipped with automatic blowdown.
- (8) Activities associated with emergencies, including the following emergency generators:
- (A) Diesel Powered – 519 HP, located at Primary Substation
  - (B) Diesel Powered – 1109 HP, located at CGL
  - (C) Diesel Powered – 1180 HP, located at CCM
  - (D) Diesel Powered – 349 HP, located at TM
  - (E) Diesel Powered – 1039 HP, located at APL/CPL
  - (F) Diesel Powered – 1039 HP, located at Reservoir
  - (G) Diesel Powered – 235 HP, located at Reservoir - Fire
- (9) Two (2) APL natural gas fired Torpedo Heaters, each with a maximum heat input capacity of 0.4 MMBtu/hr, installed in 2004.
- (b) This stationary source also includes the following insignificant activities, operated by on-site contractors, which are specifically regulated, as defined in 326 IAC 2-7-1(21):

**AIR LIQUIDE INDUSTRIAL, U.S.L.P.**

- (a) One (1) hydrogen generator using natural gas as feedstock, maximum input capacity of 6.24 MMBtu/hr;
- (b) One (1) cooling tower, maximum capacity of 3,700 gallons per minute; and
- (c) One (1) natural gas-fired emergency generator, maximum capacity of 80 KVA, with natural gas consumption rate of 1,138 cuft per hour.

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**PRECISION STRIP, INC.**

- (a) One (1) backup electrostatic oiler, with a maximum capacity of 123.2 pounds per hour oil, not to exceed 15% of Precision Strip's total operation.
- (b) Mechanical cold rolled steel coil slitting operation, rated at 176,000 pounds per hour coiled steel, using various oils, with no emissions.

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

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

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

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## SECTION B

## GENERAL CONDITIONS

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

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

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

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- (a) This permit, T147-11043-00041, 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 Enforceability [326 IAC 2-7-7] [IC 13-17-12]

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

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

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

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

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

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

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

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

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

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

- (a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:
- (1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(34), and
  - (2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) A "responsible official" is defined at 326 IAC 2-7-1(34).

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

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

Indiana Department of Environmental Management  
Compliance 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;

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- (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 (12)][326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3]

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- (a) If required by specific condition(s) in Section D of this permit, 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).

The Permittee shall implement the PMPs.

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance

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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).

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

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

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

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

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, or Southwest 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

Southwest Regional Office phone: (812) 380-2305; fax: (812) 380-2304.

- (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

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

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

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

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(8) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

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

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this

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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)]

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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 T147-11043-00041 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
  - (2) revised under 326 IAC 2-7-10.5, or
  - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this combined permit, all previous registrations and permits are superseded by this combined new source review and part 70 operating permit.

B.14 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.15 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.

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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.16 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).

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

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

B.18 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

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

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

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

and

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

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

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

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

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

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]  
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (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.19 Source Modification Requirement [326 IAC 2-7-10.5]**

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

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B.20 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.21 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)]

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B.22 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.23 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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

B.24 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.

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**SECTION C**

**SOURCE OPERATION CONDITIONS**

Entire Source

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

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

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

**C.2 Overall Source Limit [326 IAC 2-2]**

Pursuant to Construction Permit 147-6713-00041, issued February 13, 1997, and A147-11471-00041, issued April 18, 2002, the emissions of sulfur dioxide, asbestos, lead, beryllium, mercury, vinyl chloride, fluorides, hydrogen sulfide, sulfuric acid mist and total reduced sulfur compounds (including hydrogen sulfide) shall not exceed the annual significant levels established in 326 IAC 2-2 (PSD) and 40 CFR 52.21. Therefore the requirements of 326 IAC 2-2 and 40 CFR 52.21 are not applicable.

**C.3 Opacity [326 IAC 5-1]**

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

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

**C.4 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.5 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.

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

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

C.7 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

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- (a) For AK Steel, Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan included in Construction Permit 147-6713-00041, issued February 13, 1997, and amended in Amendment 147-10571-00041, issued March 4, 1999. The plan consists of AK Steel Corporation meeting all of the following criteria:
- (1) All roads associated with routine plant operations and parking lots located on the AK Steel property shall be paved;
  - (2) All paved road segments and parking lots shall be cleaned with a vehicular vacuum sweeper once every month to control PM10 emissions to no more than 3 tons per year and PM emissions to no more than 15 tons per year. Additionally, the following requirements shall apply:
    - (A) If a fugitive dust problem occurs at any time, the Permittee shall employ the sweeper as soon as practicably possible in the incident areas;
    - (B) After each incident, and the initial sweeper cleaning thereof, the Permittee shall sweep all incident areas, a second time, but no longer than 14 days after the incident; and
    - (C) The monthly schedule resumes only after 14 consecutive incident - free days have passed.
  - (3) Silt surface loading shall not exceed 16.8 pounds of silt per mile.

The cleaning activities of the paved road segments and parking lots may be delayed by one day when:

- (1) 0.1 or more inches of rain has accumulated during the 24-hour period prior to the scheduled cleaning;
- (2) The road segment is closed or abandoned. Abandoned roads will be barricaded to prevent vehicle access;
- (3) It is raining at the time of the scheduled cleaning; or
- (4) Road surface temperature is below 35 degrees Fahrenheit.

Upon request of the Assistant Commissioner, AK Steel Corporation shall sample surface material silt content and surface dust loadings at paved segments specified by IDEM in accordance with field and laboratory procedures set by IDEM within 15 days of the request. The sample results shall be submitted to IDEM within 30 days of the sample

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date. Supplemental cleaning parameters of the paved roads and/or parking lots found to exceed the controlled silt surface loading of 16.8 pounds of silt per mile shall also be submitted to the IDEM within 30 days of the sample date.

- (b) The plan 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.8 Stack Height [326 IAC 1-7]**

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

**C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]**

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- (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

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

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

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

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

#### **C.10 Performance Testing [326 IAC 3-6]**

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- (a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
  
no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

#### **C.12 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]**

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

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

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

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

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

#### **C.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

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

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alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

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

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

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

(a) The Permittee 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 ninety (90) days after the date of issuance of this permit.

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

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

**C.16 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

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

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall 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).

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

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

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

- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
- (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue  
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.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following:

- (AA) All calibration and maintenance records.
- (BB) All original strip chart recordings for continuous monitoring instrumentation.
- (CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following:

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

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

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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 326 IAC 2-2-8(b)(6)(A), 326 IAC 2-2-8(b)(6)(B), 326 IAC 2-3-2(l)(6)(A), and/or 326 IAC 2-3-2(l)(6)(B)) that a “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:
  - (1) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, document and maintain the following records:
    - (A) A description of the project.
    - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
    - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
      - (i) Baseline actual emissions;
      - (ii) Projected actual emissions;
      - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(pp)(2)(A)(iii) and/or 326 IAC 2-3-1(kk)(2)(A)(iii); and
      - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
- (d) If there is a reasonable possibility (as defined in 326 IAC 2-2-8(b)(6)(A) and/or 326 IAC 2-3-2(l)(6)(A)) that a “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

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

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B - Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to 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) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (e) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1(o) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:

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- (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1(ww) and/or 326 IAC 2-3-1(pp), for that regulated NSR pollutant, and
  - (2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).
- (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.21 Compliance with 40 CFR 82 and 326 IAC 22-1**

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

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## SECTION D.1

## FACILITY OPERATION CONDITIONS

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

- (a) A Continuous Anneal and Pickling Line (APL) with a maximum normal capacity of 130 tons per hour consisting of:
- (1) one (1) flattener,
  - (2) one (1) shear,
  - (3) one (1) laser welder,
  - (4) one (1) leveller shear,
  - (5) one (1) alkaline cleaner section exhausting through a wet scrubber system to Stack S06,
  - (6) one (1) 110.0 MMBtu/hr natural gas-fired annealing furnace section equipped with low-NOx burners with integral exhaust gas recirculation (or equivalent) exhausting to Stack S07A,
  - (7) one (1) 55.0 MMBtu/hr natural gas-fired annealing furnace section equipped with low-NOx burners with integral exhaust gas recirculation (or equivalent) exhausting to Stack S07B,
  - (8) one (1) air quench station consisting of 10 sections exhausting through a baghouse to Stack S08,
  - (9) one (1) water quench sections,
  - (10) one (1) cooling tower with 1650 gallons per minute recirculating capacity,
  - (11) one (1) enclosed shot blasting chamber exhausting through a baghouse to Stack S05,
  - (12) electrolytic pickle and rinse tanks exhausting through a wet scrubber system to Stack S09A,
  - (13) mixed acids pickle and rinse tanks exhausting through a multi-stage oxidation/reduction and acid neutralization scrubbing system to Stack S09B,
  - (14) one (1) steam heated strip dryer,
  - (15) skin pass temper mill and roll cleaning dust collection system exhausting through individual baghouses to Stack S09C, and
  - (16) one (1) tension/leveller and side trimmer.

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

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

#### D.1.1 Particulate Matter (PM/PM10) Best Available Control Technology (BACT) [326 IAC 2-2]

Pursuant to Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 21, and A147-11471-00041, issued April 18, 2002, operation condition 21, and 326 IAC 2-2-3 (PSD BACT), the processes of the Continuous Annealing and Pickling Line shall be limited as follows:

- (a) The alkaline cleaner shall be enclosed and maintained under negative pressure. The filterable particulate matter (PM/PM<sub>10</sub>) generated from this process shall be controlled by a wet scrubber system. Particulate matter (where PM10 includes both filterable and condensable portions) shall not exceed 0.0044 grains per dscf and 0.377 pounds per hour.
- (b) Filterable particulate matter (PM/PM10) generated from the air quench station shall be controlled by a baghouse (S08). Particulate matter (where PM10 includes both filterable and condensable portions) shall not exceed 0.005 grains per dscf and 1.41 pounds per hour.

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- (c) The shot blaster chamber shall be enclosed and maintained under negative pressure. The particulate matter generated from the operation shall be exhausted to a baghouse (S05) with an outlet grain loading not to exceed 0.000009 grains per dscf. The particulate matter emissions shall not exceed 0.006 pounds per hour.
- (d) Filterable particulate emissions (PM/PM10) generated from the electrolytic pickling section shall be controlled by a wet scrubber system (S09A). The outlet grain loading from the scrubber for filterable particulate matter shall not exceed 0.0022 grains per dscf and 0.349 pounds per hour. Particulate matter (where PM10 includes both filterable and condensable portions) shall not exceed 0.0093 grains per dscf and 0.77 pounds per hour.
- (e) The mixed acid pickle and rinse tanks shall be enclosed and maintained under negative pressure. The particulate matter generated from this process shall be controlled by a wet scrubber system (S09B). The outlet grain loading for filterable particulate matter shall not exceed 0.003 grains per dscf and 0.153 pounds per hour. Total particulate matter (including condensable PM10) shall not exceed 0.0060 grains per dscf and 0.28 pounds per hour.
- (f) The strip dryer shall only use steam heat.
- (g) Filterable particulate matter (PM/PM10) generated from the skin pass temper mill and roll cleaning dust collection system shall be controlled by individual baghouses to a common Stack (S09C). Particulate matter (where PM10 includes both filterable and condensable portions) shall not exceed 0.0066 grains per dscf and 0.459 pounds per hour.

D.1.2 Nitrogen Oxides (NOx) Best Available Control Technology (BACT) [326 IAC 2-2]

Pursuant to Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 21, and A147-11471-00041, issued April 18, 2002, and 326 IAC 2-2-3 (PSD BACT), the processes of the Continuous Annealing and Pickling Line shall be limited as follows:

- (a) The 110.0 MMBtu per hour annealing furnace section No.1 and the 55.0 MMBtu per hour annealing furnace section No.2 shall each use only natural gas and NOx emissions shall be controlled by ultra low-NOx burners with integral exhaust gas recirculation (or its equivalent). Pursuant to Significant Source Modification 147-19502-00041, issued August 5, 2005, nitrogen oxide emissions from the furnaces shall not exceed the following limits:

Furnace	Stainless Steel Type	lb/MMBtu	lb/hr
110 MMBtu/hr (Section No.1)	400 Cold Roll	0.08	8.0
	300 Cold Roll	0.087	9.6
	300 Hot Roll	0.04	4.4
55 MMBtu/hr (Section No.2)	400 Cold Roll	0.14	7.7
	300 Cold Roll	0.11	6.1
	300 Hot Roll	0.04	2.2

- (b) The Permittee shall employ an operational practice called "smoke and anneal" for certain grades of stainless steel in the 110.0 MMBtu per hour annealing furnace section No.1 and the 55.0 MMBtu per hour annealing furnace section No.2. This operational practice shall be limited to no more than 48 days or 1152 hours per 12 consecutive month period. The outlet nitrogen oxide loading shall not exceed 0.080 pounds per MMBtu during this operation. The combined nitrogen oxide emissions from the two sections of the annealing furnace shall not exceed 13.2 pounds per hour and 7.60 tons per year for this operation.

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**D.1.3 Nitrogen Oxides (NO<sub>x</sub>) PSD Best Available Control Technology (BACT) [326 IAC 2-2]**

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- (a) The mixed acid pickle, and rinse tanks for the APL shall be enclosed and maintained under negative pressure.
- (b) Pursuant to 326 IAC 2-2-3 (PSD BACT), the APL and the CPL in SECTION D.2 which are both controlled by the wet scrubber system (S09B), shall be limited to a NO<sub>x</sub> concentration of 175 parts per million by volume dry (ppmvd) measured at the outlet of the scrubber.
- (c) The APL NO<sub>x</sub> emissions combined with the NO<sub>x</sub> emissions of the CPL in SECTION D.2, shall be limited to 9.66 pounds per hour after control.

**Compliance Determination Requirements**

**D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]**

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- (a) In order to demonstrate compliance with Condition D.1.1, the Permittee shall perform PM and PM<sub>10</sub> testing for S06, S08, S09A, S09B, and S09C, utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition. PM<sub>10</sub> includes filterable and condensable PM.
- (b) In order to demonstrate compliance with Conditions D.1.2 and D.1.3, the Permittee shall perform NO<sub>x</sub> testing for S07A, S07B, S09A, and S09B, utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling). Section C - Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition.

**D.1.5 Control Equipment**

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- (a) In order to ensure compliance with Condition D.1.1, baghouses (S05, S08, S09C), shall be operated at all times and controlling PM when their respective emission units (shotblasting chamber, air quench station, electrolytic pickle, skin pass temper, and roll cleaning dust collection system) are in operation.
- (b) In order to ensure compliance with Condition D.1.1, scrubbers (S06, S09A, S09B), shall be operated at all times when their respective emission units (alkaline cleaner, electrolytic pickle and rinse tanks, and mixed acids pickle and rinse tanks) are in operation.
- (c) In the event that scrubber failure has been observed:  
  
Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emission unit shall be shut down no later than the completion of the processing of the material in the line or emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

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

**D.1.6 Visible Emissions Notations**

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- (a) Daily visible emission notations of stack exhausts (S05, S06, S08, S09A, S09B, S09C) shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

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- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee, including trained personnel under contract with the source, is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

#### D.1.7 Parametric Monitoring for Baghouses

- (a) The Permittee shall record the pressure drop across the baghouses (S05, S08, S09C) used in conjunction with the APL at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.3 and 8.0 inches of water until a new range is established during the latest stack test, the Permittee shall take reasonable response steps. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

#### D.1.8 Broken or Failed Bag Detection - Multi-Compartment Baghouse

In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

#### D.1.9 Parametric Monitoring for Scrubbers

- (a) The Permittee shall record the pH of the scrubbing liquid (if applicable), pressure drop and scrubbing liquid flow rate of the scrubbers (S06, S09A, S09B) used in conjunction with the APL at least once per day when the process is in operation. When for any one reading each parametric range or the minimum operating parameter for the scrubbers in the below table is outside the range listed in the table below, until a new range is established during the latest stack test, the Permittee shall take reasonable response steps. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. A reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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Scrubber ID	Pressure Drop Range across the Scrubber (inches)	Minimum Flow Rate of Scrubbing Liquor (gallons/minute)	pH of Scrubbing Liquor
APL/CPL Mixed Scrubber (S09B)	0.25 - 5.0	250	8.0 - 12.5
Electrolytic Pickle & Rinse Tanks Scrubber (S09A)	0.5 - 5.5	550	N/A
Alkaline Cleaner Scrubber (S06)	1.0 - 8.0	300	N/A

- (b) The instruments used for determining the pH of the scrubbing liquid (if applicable), pressure drop, and scrubbing liquid flow rate at the inlet of the control device shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

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

#### D.1.10 Record Keeping Requirements

- (a) To document the compliance status with Condition D.1.2(b), the Permittee shall maintain hourly records of the “smoke and anneal” operational practice.
- (b) To document the compliance status with Condition D.1.6, the Permittee shall maintain records of the daily visible emission notations for stacks S05, S06, S08, S09A, S09B, and S09C. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (e.g., the process did not operate that day).
- (c) To document the compliance status with Condition D.1.7, the Permittee shall maintain daily records of the pressure drop across the baghouses (S05, S08, S09C). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the process did not operate that day).
- (d) To document the compliance status with Condition D.1.9, the Permittee shall maintain daily records of the pressure drop across the scrubbers (S06, S09A, S09B). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the process did not operate that day).
- (e) To document the compliance status with Condition D.1.9, the Permittee shall maintain daily records of the pH and flow rate of the scrubbing liquor from scrubbers (S06, S09A, S09B). The Permittee shall include in its daily record when a pH and/or flow rate reading is not taken and the reason for the lack of reading (e.g., the process did not operate that day).
- (f) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

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## SECTION D.2

## FACILITY OPERATION CONDITIONS

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

- (b) A Continuous Pickling Line (CPL) with a maximum normal capacity of 476 tons per hour consisting of:
- (1) one (1) strip leveller and one (1) mechanical scale breaker exhausting through a baghouse to Stack S01,
  - (2) one (1) laser welder and one (1) tension leveller,
  - (3) three (3) HCl (Hydrochloric) acid pickle and rinse tanks;
    - (A) when processing carbon steel only: three (3) HCl acid pickle and rinse tanks exhausting through a wet scrubber system to Stack S02;
    - (B) when processing stainless steels only: three (3) HCl acid pickle tanks exhausting through a wet scrubber system to Stack S02; mixed acid and rinse tanks exhausting through a wet scrubber system Stack S02, through the electrolytic pickle scrubber system on the APL to Stack S09A, and exhausting through the multi-stage oxidation/reduction and acid neutralization scrubbing system on the APL at Stack S09B.
  - (4) one (1) steam heated pickle dryer,
  - (5) one (1) shear/trimmer, and
  - (6) one (1) CPL electrostatic oiler.

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

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

#### D.2.1 Particulate Matter (PM/PM10) Best Available Control Technology (BACT) [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Best Available Control Technology), Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 22, and A147-11471-00041, issued April 18, 2002, and 326 IAC 2-2 (PSD BACT), the processes of the continuous pickling line (CPL) shall be limited as follows:

- (a) Filterable particulate matter (PM/PM10) generated from the strip leveller and mechanical scale breaker shall be controlled by a baghouse. The outlet grain loading of the baghouse for filterable particulate matter shall not exceed 0.0044 grains per dscf and 1.52 pounds per hour. Particulate matter (where PM10 includes both filterable and condensable portions) shall not exceed 0.0076 grains per dscf and 3.69 pounds per hour.
- (b) The HCl pickling baths and rinse tanks shall be enclosed and maintained under negative pressure. The filterable particulate matter (PM/PM10 HCl acid mist) generated from this process shall be controlled by a wet scrubber system. The outlet grain loading from the scrubber for filterable particulate matter shall not exceed 0.0020 grains per dscf and 0.206 pounds per hour. Particulate matter (where PM10 includes both filterable and condensable portions) shall not exceed 0.0091 grains per dscf and 0.61 pounds per hour.
- (c) The pickling line dryer shall only use steam heat.
- (d) The rust Preventive oils shall be applied to the metal strips electrostatically.

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**D.2.2 Nitrogen Oxides (NO<sub>x</sub>) Best Available Control Technology (BACT) [326 IAC 2-2]**

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- (a) The mixed acid pickle, and rinse tanks for the CPL shall be enclosed and maintained under negative pressure.
- (b) Pursuant to 326 IAC 2-2-3 (PSD BACT), the CPL and the APL in SECTION D.1 which are both controlled by the wet scrubber system (S09B) shall be limited to a NO<sub>x</sub> concentration of 175 ppmvd measured at the outlet of the scrubber.
- (c) The CPL NO<sub>x</sub> emissions combined with the NO<sub>x</sub> emissions of the APL in SECTION D.1, shall be limited to 9.66 pounds per hour after control.

**D.2.3 Hazardous Air Pollutants**

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Pursuant to Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 19, and Amendment 147-11471-00041, issued April 18, 2002, the emissions of hazardous air pollutants from the entire source shall be less than 10 tons per 365 day period for any individual HAP and 25 tons per 365 day period of any combination of HAPs.

**Compliance Determination Requirements**

**D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]**

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- (a) In order to demonstrate compliance with Condition D.2.1, the Permittee shall perform PM and PM<sub>10</sub> testing for S01 and S02 utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the testing required by this condition. PM<sub>10</sub> includes filterable and condensable PM.
- (b) In order to demonstrate compliance with Condition D.2.2, the Permittee shall perform NO<sub>x</sub> testing for S02, S09A, and S09B, utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the testing required by this condition.

**D.2.5 Particulate Matter (PM) Control**

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- (a) In order to ensure compliance with Condition D.2.1, baghouse (S01) shall be operated at all times and controlling PM when the strip leveler and mechanical scale breaker are in operation.
- (b) In order to ensure compliance with Condition D.2.1, scrubber S02 shall be operated at all times and controlling PM when the three (3) HCl acid pickle and rinse tanks are in operation.
- (c) In the event that scrubber failure has been observed:  
  
Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emission unit shall be shut down no later than the completion of the processing of the material in the line or emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

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

### D.2.6 Visible Emissions Notations

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- (a) Daily visible emission notations of stack exhaust from S01 and S02 shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee, including trained personnel under contract with the source, is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

### D.2.7 Parametric Monitoring for Baghouse

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- (a) The Permittee shall record the pressure drop across the baghouse (S01) used in conjunction with the CPL at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.5 and 5.0 inches of water until a new range is established during the latest stack test, the Permittee shall take reasonable response steps. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

### D.2.8 Broken or Failed Bag Detection - Multi-Compartment Baghouse

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In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

### D.2.9 Parametric Monitoring for Scrubber

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- (a) The Permittee shall record the pH of the scrubbing liquid, pressure drop and scrubbing liquid flow rate of scrubbers S02, S09A, and S09B at least once per day when the process is in operation. When for any one reading each parametric range or the minimum operating parameter for the scrubbers in the below table is outside its normal range in the table below, until a new range is established during the latest stack test, the Permittee shall take reasonable response steps. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. A reading that is outside the above mentioned range is not a

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deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

Scrubber ID	Pressure Drop Range across the Scrubber (inches)	Minimum Flow Rate of Scrubbing Liquor (gallons/minute)	pH of Scrubbing Liquor
APL/CPL Mixed Scrubber (SO9B)	0.25 - 5.0	250	8.0 - 12.5
Electrolytic Pickle & Rinse Tanks Scrubber (S09A)	0.5 - 5.5	550	N/A
CPL HCL Scrubber (SO2)	0.5 - 6.0	250	5.5 - 9.5

- (b) The instruments used for determining the pH of the scrubbing liquid, pressure drop, and scrubbing liquid flow rate at the inlet of the control device shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

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

**D.2.10 Record Keeping Requirements**

- (a) To document the compliance status with Condition D.2.6, the Permittee shall maintain records of the daily visible emission notations for stacks S01 and S02. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (e.g., the process did not operate that day).
- (b) To document the compliance status with Condition D.2.7, the Permittee shall maintain daily records of the pressure drop across the baghouse S01. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the process did not operate that day).
- (c) To document the compliance status with Condition D.2.9, the Permittee shall maintain daily records of the pressure drop across the scrubbers S02, S09A, and SO9B. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the process did not operate that day).
- (d) To document the compliance status with Condition D.2.9, the Permittee shall maintain daily records of the pH and flow rate of the scrubbing liquor from scrubbers S02, S09A, and SO9B. The Permittee shall include in its daily record when a pH and/or flow rate reading is not taken and the reason for the lack of reading (e.g., the process did not operate that day).
- (e) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

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### SECTION D.3

### FACILITY OPERATION CONDITIONS

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

- (c) A Continuous Cold Mill (CCM) with a maximum normal capacity of 660 tons per hour consisting of:
  - (1) one (1) strip leveller and one (1) shear,
  - (2) one (1) laser welder,
  - (3) five (5) cold reduction mills exhausting through one (1) mist elimination system to Stack S11; and
  - (4) one (1) cold mill rotary shear and tension reels.
- (d) One (1) Temper Mill with a maximum capacity of 300 tons per hour exhausting through one (1) oil mist elimination system to Stack S16.

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

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

##### D.3.1 Particulate Matter (PM/PM10) Best Available Control Technology (BACT) [326 IAC 2-2]

- (a) Pursuant to 326 IAC 2-2-3 (Best Available Control Technology), Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 23, and A147-11471-00041, issued April 18, 2002, and 326 IAC 2-2 (PSD BACT), the five-strand cold reduction mill shall be enclosed and maintained under negative pressure. The filterable particulate matter (PM/PM10) generated from this process shall be controlled by a mist elimination system. Particulate matter (where PM10 includes both filterable and condensable portions) shall not exceed 0.0087 grains per dscf and 16.1 pounds per hour.
- (b) Pursuant to 326 IAC 2-2-3 (Best Available Control Technology), Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 25, and A147-11471-00047, issued April 18, 2002, and 326 IAC 2-2 (PSD BACT), the filterable particulate matter (PM/PM10) generated from the temper mill shall be controlled by a mist eliminator. Particulate matter (where PM10 includes both filterable and condensable portions) shall not exceed 0.010 grains per dscf and 5.71 pounds per hour.

##### D.3.2 Opacity Best Available Control Technology [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Best Available Control Technology) and Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 14, and 326 IAC 2-2 (PSD BACT), visible emissions from stacks S11 and S16 shall not exceed an average of five (5) percent opacity in 24 consecutive readings.

#### Compliance Determination Requirements

##### D.3.3 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.3.1, the Permittee shall perform PM and PM10 testing for S11 and S16 utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the testing required by this condition. PM10 includes filterable and condensable PM.

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#### D.3.4 Particulate Matter (PM) Control

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- (a) In order to ensure compliance with Condition D.3.1, each mist elimination system (S11, S16) shall be in operation at all times when the temper mill and cold reduction mills are in operation.
- (b) In the event that mist elimination system failure has been observed:  
  
Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emission unit shall be shut down no later than the completion of the processing of the material in the line or emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

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

#### D.3.5 Visible Emissions Notations

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- (a) Daily visible emission notations of stack exhausts S11 and S16 shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. Failure to take a response steps shall be considered a deviation from this permit.

#### D.3.6 Parametric Monitoring

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- (a) The Permittee shall record the pressure drop of the mist elimination systems (S11, S16) used in conjunction with the CCM at least once per day when in operation. When for any one reading, the pressure drop across the systems are outside their normal range, until a new range is established during the latest stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. A reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (b) The instruments used for determining the pressure drop shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

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

#### D.3.7 Record Keeping Requirements

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- (a) To document the compliance status with Condition D.3.5, the Permittee shall maintain records of the daily visible emission notations for stacks S11 and S16. The Permittee

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shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (e.g., the process did not operate that day).

- (b) To document the compliance status with condition D.3.6, the Permittee shall maintain daily records of the pressure drop across each mist eliminators (S11, S16). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the process did not operate that day).
- (c) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

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## SECTION D.4

## FACILITY OPERATION CONDITIONS

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

- (e) A Continuous Galvanizing Line (CGL) with a maximum normal capacity of 183.6 tons per hour consisting of:
- (1) one (1) flattener,
  - (2) one (1) mash seam welder,
  - (3) alkaline cleaning system exhausting through a wet scrubber system to Stack S17,
  - (4) one (1) 4.1 MMBtu/hr natural gas-fired cleaning section dryer,
  - (5) one (1) 205.7 MMBtu/hr annealing furnace with a continuous emissions monitor (CEM) and controlled by a selective catalytic reduction (SCR) system exhausting to Stack S18,
  - (6) one (1) 7.0 MMBtu/hr natural gas-fired back-up galvanneal soak section burner,
  - (7) one (1) 2.05 MMBtu/hr natural gas-fired preheater for the zinc pot equipment,
  - (8) one (1) induction zinc premelt pot,
  - (9) one (1) induction heated zinc coating pot,
  - (10) one (1) 0.82 MMBtu/hr natural gas-fired edge burner,
  - (11) one (1) water quench cooling section with a closed loop, recirculating water spray,
  - (12) one (1) 4.1 MMBtu/hr natural gas-fired dryer,
  - (13) one (1) skin pass temper mill and one (1) tension leveller,
  - (14) one (1) chromate application system with one (1) roll coater,
  - (15) one (1) 6.0 MMBtu/hr natural gas-fired dryer,
  - (16) one (1) phosphate application system with one (1) roll coater,
  - (17) one (1) 5.68 MMBtu/hr natural gas-fired dryer,
  - (18) one (1) CGL electrostatic oiler, and
  - (19) one (1) rotary shear.

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

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

#### D.4.1 Particulate Matter (PM/PM10) Best Available Control Technology (BACT) [326 IAC 2-2]

Pursuant to Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 24, A147-11471-00041, issued April 18, 2002, and 326 IAC 2-2-3 (Best Available Control Technology), the filterable particulate matter (PM/PM10) generated from the alkaline cleaning baths and rinse tanks shall be controlled by a wet scrubber system (S17). The outlet grain loading from the scrubber for filterable particulate matter shall not exceed 0.0022 grains per dscf and 0.125 pounds per hour. Particulate matter (where PM10 includes both filterable and condensable portions) shall not exceed 0.0065 grains per dscf and 0.382 pounds per hour.

#### D.4.2 Nitrogen Oxides (NOx) Best Available Control Technology (BACT) [326 IAC 2-2]

Pursuant to Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 24, and 326 IAC 2-2-3 (Best Available Control Technology), the outlet nitrogen oxide loading from the 205.7 MMBtu/hr annealing and induction heating galvannealing furnace shall not exceed 0.06 pounds per MMBtu. The nitrogen oxide emissions shall not exceed 12.3 pounds per hour.

#### D.4.3 Continuous Galvanizing Line Processes Best Available Control Technology (BACT) [326 IAC 2-2]

Pursuant to Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 24, and 326 IAC 2-2-3 (Best Available Control Technology):

- (a) The 4.10 MMBtu per hour cleaning section dryer shall only use natural gas.

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- (b) The 7.0 MMBtu per hour galvanized soak section backup burner shall only use natural gas.
- (c) The 2.05 MMBtu per hour preheater for the zinc pot equipment shall only use natural gas.
- (d) The induction zinc premelt pot and induction zinc coating pot shall be heated by electricity.
- (e) The 0.82 MMBtu per hour edge burners shall only use natural gas.
- (f) The 4.1 MMBtu per hour galvanizing line dryer shall only use natural gas.
- (g) The 6.0 MMBtu per hour chromate application system dryer shall only use natural gas.
- (h) The 5.68 MMBtu per hour phosphate application with roll coater's dryer shall only use natural gas.
- (i) The rust Preventive oils shall be applied to the metal strips electrostatically.

### Compliance Determination Requirements

#### D.4.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

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- (a) In order to demonstrate compliance with Conditions D.4.1 and D.4.2, the Permittee shall perform PM and PM10 testing for S17, and NOx testing for S18 utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the testing required by this condition. PM10 includes filterable and condensable PM.
- (b) Testing using a continuous emissions monitoring system (CEMS) that meets the requirements of 326 IAC 3-5 (Continuous Monitoring of Emissions), and after it has been certified, may be used to comply with D..4(a).

#### D.4.5 Particulate Matter (PM) Control [326 IAC 2-2]

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- (a) Pursuant to Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 24, and 326 IAC 2-2-3 (Best Available Control Technology), the alkaline cleaning baths and rinse tanks shall be enclosed and maintained under negative pressure.
- (b) In order to ensure compliance with Condition D.4.1, the scrubber (S17) shall be in operation and control particulate emissions from the alkaline cleaning baths and rinse tanks at all times the alkaline cleaning baths and rinse tanks are in operation.
- (c) In the event that scrubber failure has been observed:  
  
Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emission unit shall be shut down no later than the completion of the processing of the material in the line or emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

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#### D.4.6 Nitrogen Oxides (NO<sub>x</sub>) Control [326 IAC 2-2]

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To control NO<sub>x</sub> emissions and:

- (a) Pursuant to Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 24, and 326 IAC 2-2-3 (Best Available Control Technology), the 205.7 MMBtu/hr annealing and induction heating galvannealing furnace shall be controlled by a selective catalytic reduction control (SCR).
- (b) Pursuant to Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 38, and 326 IAC 2-2 (PSD), that upon startup, the selective catalytic reduction (SCR) system shall be operated at all times when the 205.7 MMBtu per hour annealing furnace is in operation.
- (c) In the event that selective catalytic reduction system failure has been observed:  
  
Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emission unit shall be shut down no later than the completion of the processing of the material in the line or emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

#### D.4.7 Continuous Emissions Monitoring [326 IAC 3-5]

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- (a) In order to demonstrate compliance with Condition D.4.2, the Permittee shall calibrate, maintain, certify, and operate a continuous emissions monitoring system (CEMS) and related equipment for measuring NO<sub>x</sub> emissions from the annealing furnace stack exhaust (S18) in accordance with 326 IAC 3-5.
- (b) The NO<sub>x</sub> CEMS shall continuously measure the NO<sub>x</sub> emission rate and shall be operated at all times the annealing furnace is in operation except for system breakdowns, repairs, calibration checks, and zero and span adjustments.
- (c) The continuous emission monitoring system (CEMS) shall measure NO<sub>x</sub> emission rates in pounds per hour. The use of CEMS to measure and record the NO<sub>x</sub> hourly emission rates over a three (3) hour operating block averaging period is sufficient to demonstrate compliance with the limitations established in condition D.4.2. The source shall maintain records of emission rates in pounds per hour.
- (d) Whenever a continuous emission monitor is malfunctioning or is down for maintenance or repairs, the Permittee shall follow the compliance monitoring requirements in Condition D.4.10.
- (e) Nothing in the permit shall excuse the Permittee from complying with the requirements to operate a CEMS pursuant to 40 CFR 60.

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

#### D.4.8 Visible Emissions Notations

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- (a) Daily visible emission notations of the stack exhaust S17 shall be performed during normal daylight hours when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

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- (c) In the case of batch or discontinuous operations, notations shall be taken during that part of the operation specified in the facility's specific condition prescribing visible emissions.
- (d) A trained employee, including trained personnel under contract with the source, is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

#### D.4.9 Parametric Monitoring for Scrubber

- (a) The Permittee shall record the pressure drop and scrubbing liquid flow rate of scrubber S17 at least once per day when the process is in operation. When for any one reading, the pressure drop across the scrubber or the scrubbing liquid flow rate is outside their normal range, until a new range is established during the latest stack test, the Permittee shall take reasonable response steps. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. A reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (b) The instruments used for determining the pressure drop, and scrubbing liquid flow rate at the inlet of the control device shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

#### D.4.10 NOx Monitoring System Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

Whenever the NOx continuous emission monitoring system is malfunctioning or down for repairs or adjustments, the following method shall be used to provide information related to NOx emissions:

Monitoring of the SCR operating parameters for ammonia flow rate and inlet duct temperature, shall be implemented. The parameters are as follows:

- (a) The Permittee shall record the ammonia flow rate and inlet duct temperature at least four (4) times per hour until the primary CEM or a backup CEM is brought online and functioning properly. The Preventive Maintenance Plan for the SCR shall contain troubleshooting contingency and corrective actions for when the readings are outside of the normal range for any one reading during downtime of the NOx CEMS. When for any one reading, the ammonia flow rate and inlet duct temperature are outside the normal range during downtime of the NOx CEMS, the Permittee shall take reasonable response steps. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.
- (b) The instrument used for determining the ammonia flow rate and inlet duct temperature shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

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

### D.4.11 Record Keeping Requirements

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- (a) To document the compliance status with conditions D.4.2 and D.4.7, the Permittee shall maintain records of the emission rates of NO<sub>x</sub> in pounds per hour and shall perform the required record keeping in accordance with 326 IAC 3-5.
- (b) To document the compliance status with condition D.4.8, the Permittee shall maintain daily records of visible emission notations for stack S17. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (e.g., the process did not operate that day).
- (c) To document the compliance status with condition D.4.9, the Permittee shall maintain daily records of the pressure drop across the scrubber S17 and scrubbing liquid flow rate. The Permittee shall include in its daily record when a pressure drop and/or liquid flow rate reading is not taken and the reason for the lack of reading (e.g., the process did not operate that day).
- (d) To document the compliance status with condition D.4.10, the Permittee shall record the ammonia flow rate and inlet duct temperature of the SCR at least four (4) times per hour until the primary CEMS or a backup CEMS is brought online. The Permittee shall include in its record, the downtime of the CEMS, reasons of the breakdown, efforts to correct the problem, and when an ammonia flow rate and/or inlet duct temperature reading is not taken during the CEMS downtime and the reason for the lack of a reading (e.g., the process did not operate during that time).
- (e) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

### D.4.12 Reporting Requirements

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- (a) The Permittee shall perform the required reporting in accordance with 326 IAC 3-5.
- (b) A written report of excess emissions measured by the continuous emissions monitor shall be submitted each calendar quarter, using the reporting forms located at the end of this permit, or their equivalent, no later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition. Pursuant to 326 IAC 3-5-7, the averaging periods used to determine excess emissions shall be three hour block periods ending at 03:00, 06:00, 09:00, 12:00, 15:00, 18:00, 21:00, and 24:00. The excess emissions report shall consist of the following:
  - (1) A description of the nature and cause of the excess emissions, if known.
  - (2) The date and time identifying each period during which the continuous monitoring system was inoperative or malfunctioning, except for zero and span checks, and the nature of the system repair or adjustments.
  - (3) When no excess emissions have occurred and the continuous monitoring system has not been inoperative, repaired, or adjusted.
- (c) The reports described in paragraphs (a) and (b) of this condition as submitted by the Permittee 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).

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## SECTION D.5

## FACILITY OPERATION CONDITIONS

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

- (f) A Roll Repair Shop consisting of:
- (1) Two (2) electrolytic chrome dip tanks, identified as 1 East and 1 West constructed in 1998, rated at 36 tons per hour steel rolls each, or 5.5 gallons per hour chromium solution, with both exhausting through a composite mesh pad mist elimination system to Stack S15.
  - (2) One (1) electrodischarge texturing machine exhausting through a baghouse to the interior of the building.
  - (3) One (1) chrome purification tank, identified as CrPur-12, approved for construction in 2008, with a maximum capacity of 4,204,800 A-hrs/yr, using a mesh pad mist elimination system as control, and exhausting to stack S15.

(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 Matter (PM) Best Available Control Technology (BACT) [326 IAC 2-2]

- (a) That pursuant to 326 IAC 2-2-3 (Best Available Control Technology), and Construction Permit Amendment 147-9557-00041, issued May 6, 1998, operation condition 27, the particulate matter generated, measured as chromium, from the electrolytic chrome dip tanks located in the roll repair shop shall be controlled by a mesh pad mist elimination system. The outlet grain loading shall not exceed  $6.6 \times 10^6$  grains/dscf.
- (b) That pursuant to 326 IAC 2-2-3 (Best Available Control Technology), Construction Permit Amendment 147-9557-00041, issued May 6, 1998, operation condition 29, and A147-11471-00041, issued April 18, 2002, the particulate matter generated from the electrodischarge texturing machine located in the roll repair shop shall be controlled by a baghouse. The outlet grain loading shall not exceed 0.002 grains per dscf. The particulate matter emissions from the baghouse exhaust shall not exceed 0.012 pounds per hour.

#### D.5.2 Hazardous Air Pollutants

Pursuant to Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 19, and Amendment 147-11471-00041, issued April 18, 2002, and 326 IAC 2-2 (PSD), the emissions of hazardous air pollutants from the entire source shall be less than 10 tons per 365 day period for any individual HAP and 25 tons per 365 day period of any combination of HAPs.

### Compliance Determination Requirements [326 IAC 2-1.1-11] [326 IAC 2-7-6(1)]

#### D.5.3 Particulate Matter (PM) Control

- (a) In order to ensure compliance with Condition D.5.1(a), the mesh pad mist elimination system shall be in operation and control particulate emissions from each hard chromium electroplating tank at all times that each hard chromium electroplating tank is in operation.
- (b) In the event that mesh pad mist elimination system failure has been observed:  
  
Failed units and the associated process will be shut down immediately until the failed

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units have been repaired or replaced. The emission unit shall be shut down no later than the completion of the processing of the material in the line or emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

- (c) In order to ensure compliance with Condition D.5.1(b), the baghouse shall be in operation and control particulate emissions from the electrodischarge texturing machine tank at all times that the electrodischarge texturing machine tank is in operation.
- (d) For a single compartment baghouse or bin vent filter controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (e) For a single compartment baghouse or bin vent filter controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

#### **D.5.4 Parametric Monitoring for Mesh Pad Mist Elimination System**

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- (a) The Permittee shall record the pressure drop across the mesh pad mist elimination system (S15) at least once per day when a hard chromium electroplating tank is in operation. When for any one reading, the pressure drop across the system is outside the normal range, or a range established during the most recent valid compliant stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. A pressure drop reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

#### **D.5.5 Parametric Monitoring for Baghouses**

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- (a) The Permittee shall record the pressure drop across the baghouse controlling the electrodischarge texturing machine at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.5 to 5.0 inches of water, until a new range is established during the latest stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

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

**D.5.6 Record Keeping Requirements [326 IAC 2-7-5(3)]**

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- (a) To document the compliance status with Condition D.5.4, the Permittee shall maintain daily records of the pressure drop across the mesh pad mist elimination system (S15). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the process did not operate that day).
- (b) To document the compliance status with Condition D.5.5, the Permittee shall maintain daily records of the pressure drop across the baghouse used in conjunction with the electrodischarge texturing machine. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the process did not operate that day).
- (c) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

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**SECTION D.6**

**FACILITY OPERATION CONDITIONS**

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

- (g) Ancillary Equipment, as listed is:
  - (1) Hydrogen batch annealing operations, constructed in 1999 and 2000, with emissions exhausting through the roof vent system in building 500, including:
    - (A) Fifteen (15) natural gas-fired furnaces with low NOx burners, identified as hydrogen batch annealing furnaces Nos. 1-15, each with a maximum heat input capacity of 6.75 MMBtu/hr.;
    - (B) Three (3) natural gas-fired furnaces with low NOx burners, identified as hydrogen batch annealing furnaces Nos. 16-18, permitted in 2011, each with a maximum heat input capacity of 6.75 MMBtu/hr.
  - (2) Space heaters and air make-up units with each unit limited to no more than 5.2 MMBtu/hr and a combined rating limited to no more than 251 MMBtu/hr;
  - (3) Two (2) non-contact cooling towers with mist drift eliminators exhausting to the atmosphere;
  - (4) Storage tanks for HCl acid, nitric acid, and HF (Hydrofluoric) acid exhausting through a fume scrubber to Stack S04 consisting of:
    - (A) One (1) HF acid tank with a capacity of 20,000 gallons;
    - (B) One (1) nitric acid tank with a capacity of 20,000 gallons;
    - (C) Three (3) waste acid tanks, each with a capacity of 40,000 gallons, or 120,000 gallons combined;
    - (D) Three (3) HCL/ra acid tanks, each with a capacity of 40,000 gallons, or 120,000 gallons combined; and
    - (E) Two (2) CPL waste acid tanks, each with a capacity of 40,000 gallons, or 80,000 gallons combined.
  - (5) Miscellaneous storage tanks at the continuous cold mill (CCM) operation not to exceed an overall capacity of 353,000 gallons, consisting of:
    - (A) Two (2) Morgoil System 2 tanks, No.1 and No.2, each with a capacity of 18,500 gallons, or 37,000 gallons combined;
    - (B) One (1) CCM gear lube tank, with a capacity of 13,500 gallons;
    - (C) One (1) base oil storage tank, with a capacity of 10,000 gallons;
    - (D) One (1) direct oil tank, with a capacity of 4,000 gallons;
    - (E) Two (2) Emulsion tanks, No.1 and No.2, each with a capacity of 88,000 gallons, or 176,000 gallons combined; and

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- (F) Two (2) Emulsion tanks, No.3 and No.4, each with a capacity of 44,000 gallons, or 88,000 gallons combined.
- (6) Miscellaneous storage tanks at the temper mill operation not to exceed an overall capacity of 131,000 gallons, consisting of:
  - (A) One (1) direct oil application tank, with a capacity of 4,000 gallons;
  - (B) Three (3) temper mill tanks, TM1-UZ203, LSL-01, 02, and 03, each with a capacity of 10,000 gallons, or 30,000 gallons combined;
  - (C) One (1) base oil tank, with a capacity of 8,000 gallons;
  - (D) One (1) solution tank, with a capacity of 3,200 gallons;
  - (E) One (1) gear lube tank, TM-1-P-2084, with a capacity of 2,100 gallons; and
  - (F) Two (2) Morgoil tanks, TM-1-P-2000 and 99, each with a capacity of 5,300 gallons, or 10,600 gallons combined.
- (7) Miscellaneous oil storage tanks for the continuous galvanizing line (CGL) not to exceed an overall capacity of 16,250 gallons, consisting of:
  - (A) One (1) tank, GL1-PGOL-TNK-01, with a capacity of 6,000 gallons; and
  - (B) Three (3) tanks, GL1-PGOL-TNK-02, 03, and 04, each with a capacity of 3,000 gallons, or 9,000 gallons combined.
- (8) A miscellaneous oil storage tank for the continuous pickling line (CPL), consisting of one (1) CPL pickling tank, with a capacity of 15,000 gallons.

(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 State Construction and Operating Permit: Construction Permit [326 IAC 2-1.1]**

Pursuant to Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 33, and pursuant to 326 IAC 2-1.1 (State Construction and Operating Permit: Construction Permit), the space heaters and air make-up units shall be limited as follows:

- (a) each unit shall burn only natural gas,
- (b) each unit may vary in size up to a maximum of 5.2 MMBtu per hour and shall not exceed a total combined capacity of 251 MMBtu per hour, and
- (c) space heater operations utilizing natural gas shall be restricted to the months of October through April.

#### **D.6.2 Particulate Matter (PM and PM10) Best Available Control Technology (BACT) [326 IAC 2-2-3]**

- (a) Pursuant to Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 34, and pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements), the mist from the two (2) non-contact cooling towers shall be controlled by drift eliminators and exhausted to the atmosphere. The drift losses from each of the cooling towers shall not exceed 0.005% of cooling water.

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- (b) Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements), Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 35, the storage tanks for CPL HCl, nitric acid, and HF shall be controlled by a fume scrubber system. The outlet grain loading from the scrubber shall not exceed 0.0066 grains per dscf. The particulate matter emissions from Stack S04 shall not exceed 0.0967 pounds per hour.
- (c) Pursuant to PSD/SSM No. 147-28771-00041 and 326 IAC 2-2-3 (Control Technology Review Requirements), the Best Available Control Technology for PM for hydrogen batch annealing furnaces Nos. 16-18 shall be as follows:
  - (1) PM emissions shall be controlled by good combustion practices.
  - (2) PM emissions shall be less than 0.0019 lb/MMBtu and 0.013 lb/hr each.
- (d) Pursuant to PSD/SSM No. 147-28771-00041 and 326 IAC 2-2-3 (Control Technology Review Requirements), the Best Available Control Technology for PM10 for hydrogen batch annealing furnaces Nos. 16-18 shall be as follows:
  - (1) PM10 emissions shall be controlled by good combustion practices.
  - (2) PM10 emissions shall be less than 0.0076 lb/MMBtu and 0.051 lb/hr each.

**D.6.3 Nitrogen Oxides (NOx) Best Available Control Technology (BACT) [326 IAC 2-2-3]**

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Pursuant to Construction Permit 147-6713-00041, issued February 13, 1997, PSD/SSM No. 147-28771-00041, and 326 IAC 2-2-3 (Control Technology Review Requirements), the Best Available Control Technology for NOx for hydrogen batch annealing furnaces Nos. 1-18 shall be as follows:

- (a) NOx emissions shall be controlled by low NOx burners.
- (b) NOx emissions shall be less than 0.1 lb/MMBtu each.
- (c) NOx emission shall be less than 9.45 lb/hr total for hydrogen batch annealing furnaces Nos. 1-18.

**D.6.4 Carbon Monoxide (CO) and Volatile Organic Compounds (VOC) Best Available Control Technology (BACT) [326 IAC 2-2-3]**

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Pursuant to PSD/SSM No. 147-28771-00041 and 326 IAC 2-2-3 (Control Technology Review Requirements), the Best Available Control Technology for CO and VOC for the hydrogen batch annealing furnaces Nos. 16-18 shall be as follows:

- (a) CO and VOC emissions shall be controlled by good combustion practices.
- (b) CO emissions shall be less than 0.084 lb/MMBtu and 0.57 lb/hr each.
- (c) VOC emissions shall be less than 0.0055 lb/MMBtu and 0.037 lb/hr each.

**Compliance Determination Requirements**

**D.6.5 Nitrogen Oxides (NOx) Control [326 IAC 2-2]**

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In order to ensure compliance with Condition D.6.3, the eighteen (18) hydrogen batch annealing furnaces shall combust only natural gas and the low NOx burners shall be in operation at all times that the hydrogen batch annealing furnaces are in operation.

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#### D.6.6 Particulate Control

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- (a) In order to ensure compliance with Condition D.6.2, the fume scrubber system (S04) shall be in operation and control emissions from the HCl, nitric acid, and HF storage tanks at all times the tanks are in operation.
- (b) In the event that fume scrubber failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emission unit shall be shut down no later than the completion of the processing of the material in the line or emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

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

#### D.6.7 Parametric Monitoring for Scrubber

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- (a) The Permittee shall record the pressure drop range and the scrubbing liquid flow rate of scrubber S04 at least once per day when the process is in operation. The process operation occurs each time material is being added to or taken from the tanks controlled by scrubber S04. When for any one reading, the pressure drop range across the scrubber is outside the range of 0.4 to 4.0 inches, or the scrubbing liquor is below the minimum flow rate of 5 gallons per minute, until a new range is established during the latest stack test, the Permittee shall take reasonable response steps. Section C-Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. A reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (b) The instruments used for determining the pressure drop, and scrubbing liquid flow rate at the inlet of the control device shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

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

#### D.6.8 Record Keeping

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- (a) To document the compliance status with Condition D.6.7, the Permittee shall maintain daily records of the pressure drop range across the scrubber and the flow rate of the scrubbing liquor. The Permittee shall include in its daily record when a pressure drop and/or flow rate reading is not taken and the reason for the lack of reading (e.g., the process did not operate that day).
- (b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

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## SECTION D.7

## FACILITY OPERATION CONDITIONS

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

(h) Rolling oils, rust preventative oils, and prelube oils.

(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 Volatile Organic Compounds (VOC) Best Available Control Technology (BACT) [326 IAC 2-2]

Pursuant to Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 20, and 326 IAC 2-2-3 (Best Available Control Technology), the volatile organic compound (VOC) emissions of the various oils shall meet the following:

- (a) the VOC content of any rolling oil employed shall not exceed 6.9 pounds of VOC per gallon of oil, excluding water and exempt solvents;
- (b) the VOC content of any rust Preventive oil employed shall not exceed 3.3 pounds of VOC per gallon of oil, excluding water and exempt solvents; and
- (c) the VOC content of any prelube oil employed shall not exceed 0.8 pounds of VOC per gallon of oil, excluding water and exempt solvents.

#### D.7.2 Volatile Organic Compounds (VOC) Best Available Control Technology (BACT) [326 IAC 2-2]

Pursuant to Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 20, and 326 IAC 2-2-3 (Best Available Control Technology), the volatile organic compound (VOC) emissions of the various oils shall contain no hazardous air pollutants (HAPs) as defined in 326 IAC 14-1-2 and 40 CFR 61.02 and 61.03.

#### D.7.3 Surface Coating Emission Limitations [326 IAC 8-2-1]

Pursuant to 326 IAC 8-2-4 (Coil Coating Operations) part (b), after December 31, 1985, no owner or operator of a coil coating line may cause, allow, or discharge into the atmosphere of any volatile organic compounds in excess of 0.31 kilograms per liter of coating (2.6 pounds per gallon) excluding water.

### Compliance Determination Requirements

#### D.7.4 VOC and HAPs

Compliance with the VOC contents contained in Conditions D.7.1, D.7.2, and D.7.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

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

#### D.7.5 Record Keeping Requirements

- (a) To document the compliance status with Conditions D.7.1, D.7.2, and D.7.3, the Permittee shall maintain records in accordance with (1) through (2) below. Records maintained for (1) through (2) shall be taken monthly and shall be complete and sufficient

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to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.7.1, D.7.2, and D.7.3. Records necessary to demonstrate the compliance status shall be available within 30 days of the end of each compliance period.

- (1) The VOC content of each coating material used.
  - (2) The amount of coating material and solvent less water used on a monthly basis. Records may include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
- (b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

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## SECTION D.8

## FACILITY OPERATION CONDITIONS

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

- (i) Process boilers consisting of:
  - (1) North Boilers: Two (2) natural gas-fired boilers with ultra low-NOx burners, constructed in 1998, each rated at 76.0 MMBtu/hr heat input, exhausting to Stack S03.
  - (2) South Boilers: Two (2) natural gas-fired boilers with ultra low-NOx burners, constructed in 1998, each rated at 76.0 MMBtu/hr heat input, exhausting to Stack S20.

(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 Matter Limitation (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4(a) (Particulate emission limitations for sources of indirect heating: emission limitations for facilities specified in 326 IAC 6-2-1(d)), particulate emissions from all facilities used for indirect heating purposes which were constructed after September 21, 1983, shall not exceed 0.25 pounds of particulate matter per million British thermal units heat input as established by the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where:

Pt= 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).

For the facilities exhausting to Stacks S03 and S20, Q equals 304 MMBtu per hour heat input.

#### D.8.2 Nitrogen Oxides (NOx) Best Available Control Technology (BACT) [326 IAC 2-2]

Pursuant to Significant Source Modification 147-19502-00041, issued August 5, 2005:

- (a) The two 76.0 MMBtu package boilers (known as the North Boilers) shall use only natural gas and shall be equipped with ultra low NOx burners. The total outlet nitrogen oxide loading from each individual boiler shall not exceed 0.04 pounds per MMBtu. The nitrogen oxide emissions from Stack S03 shall not exceed 3.04 pounds per hour from each individual boiler.
- (b) The two 76.0 MMBtu package boilers (known as the South Boilers) shall use only natural gas and shall be equipped with ultra low NOx burners. The total outlet nitrogen oxide loading from each individual boiler shall not exceed 0.04 pounds per MMBtu. The nitrogen oxide emissions from Stack S20 shall not exceed 3.04 pounds per hour from each individual boiler.

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**D.8.3 Particulate Matter (PM), Carbon Monoxide (CO), and Volatile Organic Compounds (VOC) Best Available Control Technology (BACT) [326 IAC 2-2]**

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Pursuant to the Technical Support Document for Construction Permit 147-6713-00041, issued February 13, 1997, and 326 IAC 2-2-3 (Best Available Control Technology), the North and South boilers shall only combust natural gas as BACT for PM, CO, and VOC.

**Compliance Determination Requirements**

**D.8.4 Particulate Matter**

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In order to ensure compliance with Condition D.8.1, the boilers shall only combust natural gas as fuel.

**D.8.5 Nitrogen Oxides**

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In order to ensure compliance with Condition D.8.2, the ultra low-NOx burners for each boiler shall be operating at all times the boilers are in operation.

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

**D.8.6 Record Keeping Requirements**

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- (a) To document the compliance status with Condition D.8.2 and D.8.3, the Permittee shall keep records of the type and amount of fuel fired in each boiler.
- (b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

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**SECTION D.9**

**FACILITY OPERATION CONDITIONS - Insignificant Activities**

**Air Liquide Industrial, U.S.L.P.**

Facility Description [326 IAC 2-7-5(14)]: This industrial gas production plant consists of the following:

- (a) One (1) hydrogen generator using natural gas as feedstock, maximum input capacity of 6.24 MMBtu/hr;
- (b) One (1) cooling tower, maximum capacity of 3,700 gallons per minute; and
- (c) One (1) natural gas-fired emergency generator, maximum capacity of 80 KVA, with natural gas consumption rate of 1,138 cuft per hour.

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

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

**D.9.1 Nitrogen Oxides (NOx)**

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Any change or modification which may increase the potential nitrogen oxides emissions to 10 tons per year or more from this process must be approved by the Office of Air Quality (OAQ) before such a change may occur.

**D.9.2 Insignificant Thresholds [326 IAC 2-7-1]**

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Pursuant to 326 IAC 2-7-1(21), to remain an insignificant activity, the potential uncontrolled emissions of the industrial gas production plant shall be less than the following:

- Lead (Pb)= 0.6 ton/year or 3.29 lbs/day
- Carbon Monoxide (CO)= 25 lbs/day
- Sulfur Dioxide (SO<sub>2</sub>)= 5 lbs/hour or 25 lbs/day
- Particulate Matter (PM)= 5 lbs/hour or 25 lbs/day
- Nitrogen Oxides (NO<sub>x</sub>)= 5 lbs/hour or 25 lbs/day
- Volatile Organic Compounds (VOC)= 3 lbs/hour or 15 lbs/day

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## SECTION D.10

## FACILITY OPERATION CONDITIONS- Insignificant Activities

### Precision Strip, Inc.

Facility Description [326 IAC 2-7-5(14)]: A steel coil slitting operation consisting of:

- (a) One (1) backup electrostatic oiler, with a maximum capacity of 123.2 pounds per hour oil, not to exceed 15% of Precision Strip's total operation.
- (b) Mechanical cold rolled steel coil slitting operation, rated at 176,000 pounds per hour coiled steel, using various oils, with no emissions.

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

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

#### D.10.1 Surface Coating Emission Limitations [326 IAC 8-2-4]

Pursuant to 326 IAC 8-2-4 (Coil Coating Operations) part (b), after December 31, 1985, no owner or operator of a coil coating line may cause, allow, or discharge into the atmosphere of any volatile organic compounds in excess of 0.31 kilograms per liter of coating (2.6 pounds per gallon) excluding water.

#### D.10.2 Usage Limit

Pursuant to Amendment 147-9787-00050, issued October 2, 1998, the electrostatic oiler shall only be operated as a back-up unit in the event that any of AK Steel's electrostatic oilers, which were properly permitted under CP 147-6713-00041, breaks down or if steel coils produced by AK Steel need to be re-oiled after they have been slit per customer request. This electrostatic oiling shall not exceed 15 percent of Precision Strip's total operation.

#### D.10.3 VOC

Pursuant to 326 IAC 2-7-1(21), to remain an insignificant activity, the potential uncontrolled VOC emissions of this steel coil slitting operation shall be less than 3 lbs/hour or 15 lbs/day.

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

#### D.10.4 VOCs

Compliance with the VOC content and usage contained in Conditions D.10.1 and D.10.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

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

#### D.10.5 Record Keeping Requirements

- (a) To document the compliance status with Conditions D.10.1, D.10.2, and D.10.3, the Permittee shall maintain records in accordance with (1) through (2) below. Records maintained for (1) through (2) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.10.1, D.10.2, and D.10.3. Records necessary to demonstrate the compliance status shall be available within 30 days of the end of each compliance period.

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- (1) The VOC content of each coating material used.
  - (2) The amount of coating material and solvent less water used on a monthly basis. Records may include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
- (b) To document the compliance status with Condition D.10.3, Precision Strip, Inc., shall keep production records for the back-up electrostatic oiler related to work performed for AK Steel Corporation, Rockport Works.
- (c) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

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## SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

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

- (f) A Roll Repair Shop consisting of:
  - (1) Two (2) electrolytic chrome dip tanks, identified as 1 East and 1 West constructed in 1998, rated at 36 tons per hour steel rolls each, or 5.5 gallons per hour chromium solution, with both exhausting through a composite mesh pad mist elimination system to Stack S15.

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

### National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks - 40 CFR Part 63, Subpart N [326 IAC 2-7-5(1)]

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

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, as specified in Table 1 of 40 CFR 63, Subpart N, in accordance with the schedule in 40 CFR 63, Subpart N.

#### E.1.2 Chromium Electroplating NESHAP [40 CFR Part 63, Subpart N][326 IAC 20-8]

The Permittee which engages in a hard chromium electroplating operation shall comply with the following provisions of 40 CFR 63, Subpart N (included as Attachment A of the permit), which are incorporated by reference as 326 IAC 20-8:

- (1) 40 CFR 63.340(a)
- (2) 40 CFR 63.340(b)
- (3) 40 CFR 63.340(c)
- (4) 40 CFR 63.340(e)
- (5) 40 CFR 63.341
- (6) 40 CFR 63.342(a)
- (7) 40 CFR 63.342(b)
- (8) 40 CFR 63.342(c)
- (9) 40 CFR 63.342(f)
- (10) 40 CFR 63.342(g)
- (11) Table 1 to 40 CFR 63.342
- (12) 40 CFR 63.343(a)(2)
- (13) 40 CFR 63.343(a)(5)
- (14) 40 CFR 63.343(a)(6)
- (15) 40 CFR 63.343(b)(1)
- (16) 40 CFR 63.343(b)(2)
- (17) 40 CFR 63.343(c)(1)
- (18) 40 CFR 63.344(a)
- (19) 40 CFR 63.344(c)
- (20) 40 CFR 63.344(d)
- (21) 40 CFR 63.346(a)
- (22) 40 CFR 63.346(b)(1)
- (23) 40 CFR 63.346(b)(2)
- (24) 40 CFR 63.346(b)(3)
- (25) 40 CFR 63.346(b)(4)
- (26) 40 CFR 63.346(b)(5)

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- (27) 40 CFR 63.346(b)(6)
- (28) 40 CFR 63.346(b)(7)
- (29) 40 CFR 63.346(b)(8)
- (30) 40 CFR 63.346(b)(9)
- (31) 40 CFR 63.346(b)(10)
- (32) 40 CFR 63.346(b)(11)
- (33) 40 CFR 63.346(b)(12)
- (34) 40 CFR 63.346(b)(13)
- (35) 40 CFR 63.346(b)(16)
- (36) 40 CFR 63.346(c)
- (37) 40 CFR 63.347(a)
- (38) 40 CFR 63.347(b)
- (39) 40 CFR 63.347(c)
- (40) 40 CFR 63.347(d)
- (41) 40 CFR 63.347(e)
- (42) 40 CFR 63.347(f)
- (43) 40 CFR 63.347(h)
- (44) 40 CFR 63.348
- (41) 40 CFR 63, Subpart N, Table 1

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**SECTION E.2**

**EMISSIONS UNIT OPERATION CONDITIONS**

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

- (g) Ancillary Equipment, as listed is;
  - (4) Storage tanks for HCl acid, nitric acid, and HF (Hydrofluoric) acid exhausting through a fume scrubber to Stack S04 consisting of:
    - (A) One (1) HF acid tank with a capacity of 20,000 gallons;
    - (B) One (1) nitric acid tank with a capacity of 20,000 gallons;
    - (C) Three (3) waste acid tanks, each with a capacity of 40,000 gallons, or 120,000 gallons combined;
    - (D) Three (3) HCL/ra acid tanks, each with a capacity of 40,000 gallons, or 120,000 gallons combined; and
    - (E) Two (2) CPL waste acid tanks, each with a capacity of 40,000 gallons, or 80,000 gallons combined.
  - (5) Miscellaneous storage tanks at the continuous cold mill (CCM) operation not to exceed an overall capacity of 353,000 gallons, consisting of:
    - (E) Two (2) Emulsion tanks, No.1 and No.2, each with a capacity of 88,000 gallons, or 176,000 gallons combined; and
    - (F) Two (2) Emulsion tanks, No.3 and No.4, each with a capacity of 44,000 gallons, or 88,000 gallons combined.

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

**New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 - 40 CFR Part 60 Subpart Kb [326 IAC 2-7-5(1)]**

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

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the ten (10) storage tanks for HCl, nitric acid, and HF and four (4) emulsion tanks, identified as No. 1, No. 2, No. 3 and No. 4, respectively, at the continuous cold mill (CCM) except when otherwise specified in 40 CFR Part 60, Subpart Kb.

**E.2.2 New Source Performance Standards for Volatile Organic Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984: Requirements [40 CFR Part 60, Subpart Kb] [326 IAC 12]**

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Kb (New Source Performance Standards for Volatile Organic Storage Vessels) (included as Attachment B of this permit), which are incorporated by reference as 326 IAC 12, for the ten (10) storage tanks for HCl, nitric acid, and HF and four (4) emulsion tanks, identified as No. 1, No. 2, No. 3 and No. 4, at the continuous cold mill (CCM) which are incorporated by reference as 326 IAC 12:

- (1) 40 CFR 60.110b(a)

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- (2) 40 CFR 60.111b
- (3) 40 CFR 60.116b(a)
- (4) 40 CFR 60.116(b)
- (5) 40 CFR 60.116b(e)(3)
- (6) 40 CFR 60.117b

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**SECTION E.3**

**EMISSIONS UNIT OPERATION CONDITIONS**

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

- (i) Process boilers consisting of:
  - (1) North Boilers: Two (2) natural gas-fired boilers with ultra low-NOx burners, constructed in 1998, each rated at 76.0 MMBtu/hr heat input, exhausting to Stack S03.
  - (2) South Boilers: Two (2) natural gas-fired boilers with ultra low-NOx burners, constructed in 1998, each rated at 76.0 MMBtu/hr heat input, exhausting to Stack S20.

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

**New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units - 40 CFR Part 60, Subpart Dc [326 IAC 12]**

**E.3.1 General Provisions Relating to NSPS, Subpart Dc [326 IAC 12-1] [40 CFR Part 60, Subpart A]**

The provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the two (2) north boilers and two (2) south boilers, except when otherwise specified in 40 CFR 60, Subpart Dc.

**E.3.2 New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units [40 CFR Part 60, Subpart Dc] [326 IAC 12]**

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Dc (New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units) (included as Attachment C of this permit), which are incorporated by reference as 326 IAC 12:

- (1) 40 CFR 60.40c (a)
- (2) 40 CFR 60.41c
- (3) 40 CFR 60.48c (a)(1)
- (4) 40 CFR 60.48c (g)(1)
- (5) 40 CFR 60.48c (i)

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

Source Name: AK Steel Corporation, Rockport Works  
Source Address: 6500 North US 231, Rockport, Indiana 47635  
Part 70 Permit No.: T147-11043-00041

**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:

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**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: AK Steel Corporation, Rockport Works  
Source Address: 6500 North US 231, Rockport, Indiana 47635  
Part 70 Permit No.: T147-11043-00041

**This form consists of 2 pages**

**Page 1 of 2**

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

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

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

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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: \_\_\_\_\_

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

**PART 70 OPERATING PERMIT  
 CHROMIUM ELECTROPLATING AND ANODIZING NESHAP  
 ONGOING COMPLIANCE STATUS REPORT**

Source Name: AK Steel Corporation, Rockport Works  
 Source Address: 6500 North U.S. 231, Rockport, Indiana, 47635  
 Part 70 Permit No.: T147-11043-00041  
 Tank ID #: The electrolytic chrome dip tank  
 Type of process: Hard Chrome  
 Monitoring Parameter: Pressure drop across the composite mesh pad system during tank operation  
 Parameter Value: ±1 inch of pressure drop value established during initial performance test, or within the range of compliant values for pressure drop established during multiple performance tests  
 Limits: Total chromium emissions may not exceed 0.0000066 grains per dscf pursuant to 40 CFR 63.342(c)(1)(i)

This form is to be used to report compliance for the Chromium Electroplating and Anodizing NESHAP only.  
 The frequency for completing this report may be altered by IDEM, OAQ, Compliance and Enforcement Branch.

**Companies classified as a major source:** *Submit this report no later than 30 days after the end of the reporting period.*

This form consists of 2 pages

Page 1 of 2

BEGINNING AND ENDING DATES OF THE REPORTING PERIOD:	
TOTAL OPERATING TIME OF THE TANK DURING THE REPORTING PERIOD:	
<b>MAJOR AND AREA SOURCES: CHECK ONE</b>	
<input type="checkbox"/>	NO DEVIATIONS OF THE MONITORING PARAMETER ASSOCIATED WITH THIS TANK FROM THE COMPLIANT VALUE OR RANGE OF VALUES OCCURRED DURING THIS REPORTING PERIOD.
<input type="checkbox"/>	THE MONITORING PARAMETER DEVIATED FROM THE COMPLIANT VALUE OR RANGE OF VALUES DURING THIS REPORTING PERIOD (THUS INDICATING THE EMISSION LIMITATION MAY HAVE BEEN EXCEEDED, WHICH COULD RESULT IN MORE FREQUENT REPORTING).

<b>AREA (I.E., NON-MAJOR) SOURCES OF HAP ONLY:</b> IF DEVIATIONS OCCURRED, LIST THE AMOUNT OF TANK OPERATING TIME EACH MONTH THAT MONITORING RECORDS SHOW THE MONITORING PARAMETER DEVIATED FROM THE COMPLIANT VALUE OR RANGE OF VALUES.			
JAN	APR	JUL	OCT
FEB	MAY	AUG	NOV
MAR	JUN	SEP	DEC

<b>HARD CHROME TANKS / MAXIMUM RECTIFIER CAPACITY LIMITED IN ACCORDANCE WITH 40 CFR 63.342(c)(2) ONLY:</b> LIST THE ACTUAL AMPERE-HOURS CONSUMED (BASED ON AN AMP-HR METER) BY THE INDIVIDUAL TANK.			
JAN	APR	JUL	OCT
FEB	MAY	AUG	NOV
MAR	JUN	SEP	DEC

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**CHROMIUM ELECTROPLATING AND ANODIZING NESHAP  
ONGOING COMPLIANCE STATUS REPORT (CONTINUED)**

ATTACH A SEPARATE PAGE IF NEEDED

Page 2 of 2

IF THE OPERATION AND MAINTENANCE PLAN REQUIRED BY 40 CFR 63.342 (f)(3) WAS NOT FOLLOWED, PROVIDE AN EXPLANATION OF THE REASONS FOR NOT FOLLOWING THE PLAN AND DESCRIBE THE ACTIONS TAKEN FOR THAT EVENT:

DESCRIBE ANY CHANGES IN TANKS, RECTIFIERS, CONTROL DEVICES, MONITORING, ETC. SINCE THE LAST STATUS REPORT:

ADDITIONAL COMMENTS:

**ALL SOURCES: CHECK ONE**

- I CERTIFY THAT THE WORK PRACTICE STANDARDS IN 40 CFR 63.342(f) WERE FOLLOWED IN ACCORDANCE WITH THE OPERATION AND MAINTENANCE PLAN ON FILE; AND, THAT THE INFORMATION CONTAINED IN THIS REPORT IS ACCURATE AND TRUE TO THE BEST OF MY KNOWLEDGE.
- THE WORK PRACTICE STANDARDS IN 40 CFR 63.342(f) WERE NOT FOLLOWED IN ACCORDANCE WITH THE OPERATION AND MAINTENANCE PLAN ON FILE, AS EXPLAINED ABOVE AND/OR ON ATTACHED.

Submitted by: \_\_\_\_\_

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

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

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

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

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**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: AK Steel Corporation, Rockport Works  
Source Address: 6500 North US 231, Rockport, Indiana 47635  
Part 70 Permit No.: T147-11043-00041

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

Page 1 of 2

<p>This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B - Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C - General Reporting Requirements. 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".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
<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>	

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<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: \_\_\_\_\_

*Base metal* means the metal or metal alloy that comprises the workpiece.

*Bath component* means the trade or brand name of each component(s) in trivalent chromium plating baths. For trivalent chromium baths, the bath composition is proprietary in most cases. Therefore, the trade or brand name for each component(s) can be used; however, the chemical name of the wetting agent contained in that component must be identified.

*Chemical fume suppressant* means any chemical agent that reduces or suppresses fumes or mists at the surface of an electroplating or anodizing bath; another term for fume suppressant is mist suppressant.

*Chromic acid* means the common name for chromium anhydride ( $\text{CrO}_3$ ).

*Chromium anodizing* means the electrolytic process by which an oxide layer is produced on the surface of a base metal for functional purposes (e.g., corrosion resistance or electrical insulation) using a chromic acid solution. In chromium anodizing, the part to be anodized acts as the anode in the electrical circuit, and the chromic acid solution, with a concentration typically ranging from 50 to 100 grams per liter (g/L), serves as the electrolyte.

*Chromium anodizing tank* means the receptacle or container along with the following accompanying internal and external components needed for chromium anodizing: rectifiers fitted with controls to allow for voltage adjustments, heat exchanger equipment, circulation pumps, and air agitation systems.

*Chromium electroplating tank* means the receptacle or container along with the following internal and external components needed for chromium electroplating: Rectifiers, anodes, heat exchanger equipment, circulation pumps, and air agitation systems.

*Composite mesh-pad system* means an add-on air pollution control device typically consisting of several mesh-pad stages. The purpose of the first stage is to remove large particles. Smaller particles are removed in the second stage, which consists of the composite mesh pad. A final stage may remove any reentrained particles not collected by the composite mesh pad.

*Decorative chromium electroplating* means the process by which a thin layer of chromium (typically 0.003 to 2.5 microns) is electrodeposited on a base metal, plastic, or undercoating to provide a bright surface with wear and tarnish resistance. In this process, the part(s) serves as the cathode in the electrolytic cell and the solution serves as the electrolyte. Typical current density applied during this process ranges from 540 to 2,400 Amperes per square meter ( $\text{A/m}^2$ ) for total plating times ranging between 0.5 to 5 minutes.

*Electroplating or anodizing bath* means the electrolytic solution used as the conducting medium in which the flow of current is accompanied by movement of metal ions for the purposes of electroplating metal out of the solution onto a workpiece or for oxidizing the base material.

*Emission limitation* means, for the purposes of this subpart, the concentration of total chromium allowed to be emitted expressed in milligrams per dry standard cubic meter (mg/dscm), or the allowable surface tension expressed in dynes per centimeter (dynes/cm).

*Enclosed hard chromium electroplating tank* means a chromium electroplating tank that is equipped with an enclosing hood and ventilated at half the rate or less that of an open surface tank of the same surface area.

*Facility* means the major or area source at which chromium electroplating or chromium anodizing is performed.

*Fiber-bed mist eliminator* means an add-on air pollution control device that removes contaminants from a gas stream through the mechanisms of inertial impaction and Brownian diffusion. These devices are typically installed downstream of another control device, which serves to prevent plugging, and consist of one or more fiber beds. Each bed consists of a hollow cylinder formed from two concentric screens; the fiber between the screens may be fabricated from glass, ceramic plastic, or metal.

*Foam blanket* means the type of chemical fume suppressant that generates a layer of foam across the surface of a solution when current is applied to that solution.

*Fresh water* means water, such as tap water, that has not been previously used in a process operation or, if the water has been recycled from a process operation, it has been treated and meets the effluent guidelines for chromium wastewater.

*Hard chromium electroplating* or industrial chromium electroplating means a process by which a thick layer of chromium (typically 1.3 to 760 microns) is electrodeposited on a base material to provide a surface with functional properties such as wear resistance, a low coefficient of friction, hardness, and corrosion resistance. In this process, the part serves as the cathode in the electrolytic cell and the solution serves as the electrolyte. Hard chromium electroplating process is performed at current densities typically ranging from 1,600 to 6,500 A/m<sup>2</sup> for total plating times ranging from 20 minutes to 36 hours depending upon the desired plate thickness.

*Hexavalent chromium* means the form of chromium in a valence state of +6.

*Large, hard chromium electroplating facility* means a facility that performs hard chromium electroplating and has a maximum cumulative potential rectifier capacity greater than or equal to 60 million ampere-hours per year (amp-hr/yr).

*Maximum cumulative potential rectifier capacity* means the summation of the total installed rectifier capacity associated with the hard chromium electroplating tanks at a facility, expressed in amperes, multiplied by the maximum potential operating schedule of 8,400 hours per year and 0.7, which assumes that electrodes are energized 70 percent of the total operating time. The maximum potential operating schedule is based on operating 24 hours per day, 7 days per week, 50 weeks per year.

*Open surface hard chromium electroplating tank* means a chromium electroplating tank that is ventilated at a rate consistent with good ventilation practices for open tanks.

*Operating parameter value* means a minimum or maximum value established for a control device or process parameter which, if achieved by itself or in combination with one or more other operating parameter values, determines that an owner or operator is in continual compliance with the applicable emission limitation or standard.

*Packed-bed scrubber* means an add-on air pollution control device consisting of a single or double packed bed that contains packing media on which the chromic acid droplets impinge. The packed-bed section of the scrubber is followed by a mist eliminator to remove any water entrained from the packed-bed section.

*Research or laboratory operation* means an operation whose primary purpose is for research and development of new processes and products, that is conducted under the close supervision of technically trained personnel, and that is not involved in the manufacture of products for commercial sale in commerce, except in a de minimis manner.

*Small, hard chromium electroplating facility* means a facility that performs hard chromium electroplating and has a maximum cumulative potential rectifier capacity less than 60 million amp-hr/yr.

*Stalagmometer* means an instrument used to measure the surface tension of a solution by determining the mass of a drop of liquid by weighing a known number of drops or by counting the number of drops obtained from a given volume of liquid.

*Surface tension* means the property, due to molecular forces, that exists in the surface film of all liquids and tends to prevent liquid from spreading.

*Tank operation* means the time in which current and/or voltage is being applied to a chromium electroplating tank or a chromium anodizing tank.

*Tensiometer* means an instrument used to measure the surface tension of a solution by determining the amount of force needed to pull a ring from the liquid surface. The amount of force is proportional to the surface tension.

*Trivalent chromium* means the form of chromium in a valence state of +3.

*Trivalent chromium process* means the process used for electrodeposition of a thin layer of chromium onto a base material using a trivalent chromium solution instead of a chromic acid solution.

*Wetting agent* means the type of chemical fume suppressant that reduces the surface tension of a liquid.

(b) *Nomenclature*. The nomenclature used in this subpart has the following meaning:

(1) AMR=the allowable mass emission rate from each type of affected source subject to the same emission limitation in milligrams per hour (mg/hr).

(2)  $AMR_{sys}$ =the allowable mass emission rate from affected sources controlled by an add-on air pollution control device controlling emissions from multiple sources in mg/hr.

(3) EL=the applicable emission limitation from §63.342 in milligrams per dry standard cubic meter (mg/dscm).

(4)  $IA_{total}$ =the sum of all inlet duct areas from both affected and nonaffected sources in meters squared.

(5)  $IDA_i$ =the total inlet area for all ducts associated with affected sources in meters squared.

(6)  $IDA_{i,a}$ =the total inlet duct area for all ducts conveying chromic acid from each type of affected source performing the same operation, or each type of affected source subject to the same emission limitation in meters squared.

(7) VR=the total of ventilation rates for each type of affected source subject to the same emission limitation in dry standard cubic meters per minute (dscm/min).

(8)  $VR_{inlet}$ =the total ventilation rate from all inlet ducts associated with affected sources in dscm/min.

(9)  $VR_{inlet,a}$ =the total ventilation rate from all inlet ducts conveying chromic acid from each type of affected source performing the same operation, or each type of affected source subject to the same emission limitation in dscm/min.

(10)  $VR_{tot}$ =the average total ventilation rate for the three test runs as determined at the outlet by means of the Method 306 in appendix A of this part testing in dscm/min.

[60 FR 4963, Jan. 25, 1995, as amended at 69 FR 42894, July 19, 2004]

**§ 63.342 Standards.**

(a) Each owner or operator of an affected source subject to the provisions of this subpart shall comply with these requirements on and after the compliance dates specified in §63.343(a). All affected sources are regulated by applying maximum achievable control technology.

(b) *Applicability of emission limitations.* (1) The emission limitations in this section apply during tank operation as defined in §63.341, and during periods of startup and shutdown as these are routine occurrences for affected sources subject to this subpart. The emission limitations do not apply during periods of malfunction, but the work practice standards that address operation and maintenance and that are required by paragraph (f) of this section must be followed during malfunctions.

(2) If an owner or operator is controlling a group of tanks with a common add-on air pollution control device, the emission limitations of paragraphs (c), (d), and (e) of this section apply whenever any one affected source is operated. The emission limitation that applies to the group of affected sources is:

(i) The emission limitation identified in paragraphs (c), (d), and (e) of this section if the affected sources are performing the same type of operation (e.g., hard chromium electroplating), are subject to the same emission limitation, and are not controlled by an add-on air pollution control device also controlling nonaffected sources;

(ii) The emission limitation calculated according to §63.344(e)(3) if affected sources are performing the same type of operation, are subject to the same emission limitation, and are controlled with an add-on air pollution control device that is also controlling nonaffected sources; and

(iii) The emission limitation calculated according to §63.344(e)(4) if affected sources are performing different types of operations, or affected sources are performing the same operations but subject to different emission limitations, and are controlled with an add-on air pollution control device that may also be controlling emissions from nonaffected sources.

(c)(1) *Standards for open surface hard chromium electroplating tanks.* During tank operation, each owner or operator of an existing, new, or reconstructed affected source shall control chromium emissions discharged to the atmosphere from that affected source by either:

(i) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.015 milligrams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air ( $6.6 \times 10^{-6}$  grains per dry standard cubic foot (gr/dscf)) for all open surface hard chromium electroplating tanks that are affected sources other than those that are existing affected sources located at small hard chromium electroplating facilities; or

(ii) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.03 mg/dscm ( $1.3 \times 10^{-5}$  gr/dscf) if the open surface hard chromium electroplating tank is an existing affected source and is located at a small, hard chromium electroplating facility; or

(iii) If a chemical fume suppressant containing a wetting agent is used, by not allowing the surface tension of the electroplating or anodizing bath contained within the affected tank to exceed 45 dynes per centimeter (dynes/cm) ( $3.1 \times 10^{-3}$  pound-force per foot (lb<sub>f</sub>/ft)) as measured by a stalagmometer or 35 dynes/cm ( $2.4 \times 10^{-3}$  lb<sub>f</sub>/ft) as measured by a tensiometer at any time during tank operation.

(2) *Standards for enclosed hard chromium electroplating tanks.* During tank operation, each owner or operator of an existing, new, or reconstructed affected source shall control chromium emissions discharged to the atmosphere from that affected source by either:

(i) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.015 mg/dscm ( $6.6 \times 10^{-6}$  gr/dscf) for all enclosed hard chromium electroplating tanks that are affected sources other than those that are existing affected sources located at small, hard chromium electroplating facilities; or

(ii) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.03 mg/dscm ( $1.3 \times 10^{-5}$  gr/dscf) if the enclosed hard chromium electroplating tank is an existing affected source and is located at a small, hard chromium electroplating facility; or

(iii) If a chemical fume suppressant containing a wetting agent is used, by not allowing the surface tension of the electroplating or anodizing bath contained within the affected tank to exceed 45 dynes/cm ( $3.1 \times 10^{-3}$  lb<sub>f</sub>/ft) as measured by a stalagmometer or 35 dynes/cm ( $2.4 \times 10^{-3}$  lb<sub>f</sub>/ft) as measured by a tensiometer at any time during tank operation; or

(iv) Not allowing the mass rate of total chromium in the exhaust gas stream discharged to the atmosphere to exceed the maximum allowable mass emission rate determined by using the calculation procedure in §63.344(f)(1)(i) for all enclosed hard chromium electroplating tanks that are affected sources other than those that are existing affected sources located at small, hard chromium electroplating facilities; or

(v) Not allowing the mass rate of total chromium in the exhaust gas stream discharged to the atmosphere to exceed the maximum allowable mass emission rate determined by using the calculation procedure in §63.344(f)(1)(ii) if the enclosed hard chromium electroplating tank is an existing affected source and is located at a small, hard chromium electroplating facility.

(3)(i) An owner or operator may demonstrate the size of a hard chromium electroplating facility through the definitions in §63.341(a). Alternatively, an owner or operator of a facility with a maximum cumulative potential rectifier capacity of 60 million amp-hr/yr or more may be considered small if the actual cumulative rectifier capacity is less than 60 million amp-hr/yr as demonstrated using the following procedures:

(A) If records show that the facility's previous annual actual rectifier capacity was less than 60 million amp-hr/yr, by using nonresettable ampere-hr meters and keeping monthly records of actual ampere-hr usage for each 12-month rolling period following the compliance date in accordance with §63.346(b)(12). The actual cumulative rectifier capacity for the previous 12-month rolling period shall be tabulated monthly by adding the capacity for the current month to the capacities for the previous 11 months; or

(B) By accepting a federally-enforceable limit on the maximum cumulative potential rectifier capacity of a hard chromium electroplating facility and by maintaining monthly records in accordance with §63.346(b)(12) to demonstrate that the limit has not been exceeded. The actual cumulative rectifier capacity for the previous 12-month rolling period shall be tabulated monthly by adding the capacity for the current month to the capacities for the previous 11 months.

(ii) Once the monthly records required to be kept by §63.346(b)(12) and by this paragraph (c)(3)(ii) show that the actual cumulative rectifier capacity over the previous 12-month rolling period corresponds to the large designation, the owner or operator is subject to the emission limitation identified in paragraph (c)(1)(i), (iii), (c)(2)(i), (iii), or (iv) of this section, in accordance with the compliance schedule of §63.343(a)(5).

(d) *Standards for decorative chromium electroplating tanks using a chromic acid bath and chromium anodizing tanks.* During tank operation, each owner or operator of an existing, new, or reconstructed

affected source shall control chromium emissions discharged to the atmosphere from that affected source by either:

(1) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.01 mg/dscm ( $4.4 \times 10^{-6}$  gr/dscf); or

(2) If a chemical fume suppressant containing a wetting agent is used, by not allowing the surface tension of the electroplating or anodizing bath contained within the affected source to exceed 45 dynes/cm ( $3.1 \times 10^{-3}$  lb<sub>f</sub>/ft) as measured by a stalagmometer or 35 dynes/cm ( $2.4 \times 10^{-3}$  lb<sub>f</sub>/ft) as measured by a tensiometer at any time during operation of the tank.

(e) *Standards for decorative chromium electroplating tanks using a trivalent chromium bath.* (1) Each owner or operator of an existing, new, or reconstructed decorative chromium electroplating tank that uses a trivalent chromium bath that incorporates a wetting agent as a bath ingredient is subject to the recordkeeping and reporting requirements of §§63.346(b)(14) and 63.347(i), but are not subject to the work practice requirements of paragraph (f) of this section, or the continuous compliance monitoring requirements in §63.343(c). The wetting agent must be an ingredient in the trivalent chromium bath components purchased from vendors.

(2) Each owner or operator of an existing, new, or reconstructed decorative chromium electroplating tank that uses a trivalent chromium bath that does not incorporate a wetting agent as a bath ingredient is subject to the standards of paragraph (d) of this section.

(3) Each owner or operator of existing, new, or reconstructed decorative chromium electroplating tank that had been using a trivalent chromium bath that incorporates a wetting agent and ceases using this type of bath must fulfill the reporting requirements of §63.347(i)(3) and comply with the applicable emission limitation within the timeframe specified in §63.343(a)(7).

(f) *Operation and maintenance practices.* All owners or operators subject to the standards in paragraphs (c) and (d) of this section are subject to these operation and maintenance practices.

(1)(i) At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices.

(ii) Malfunctions shall be corrected as soon as practicable after their occurrence.

(iii) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.

(2)(i) Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the source.

(ii) Based on the results of a determination made under paragraph (f)(2)(i) of this section, the Administrator may require that an owner or operator of an affected source make changes to the operation and maintenance plan required by paragraph (f)(3) of this section for that source. Revisions may be required if the Administrator finds that the plan:

(A) Does not address a malfunction that has occurred;

(B) Fails to provide for the proper operation of the affected source, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or

(C) Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable.

(3) *Operation and maintenance plan.* (i) The owner or operator of an affected source subject to paragraph (f) of this section shall prepare an operation and maintenance plan no later than the compliance date, except for hard chromium electroplaters and the chromium anodizing operations in California which have until January 25, 1998. The plan shall be incorporated by reference into the source's title V permit, if and when a title V permit is required. The plan shall include the following elements:

(A) The plan shall specify the operation and maintenance criteria for the affected source, the add-on air pollution control device (if such a device is used to comply with the emission limits), and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of this equipment;

(B) For sources using an add-on control device or monitoring equipment to comply with this subpart, the plan shall incorporate the operation and maintenance practices for that device or monitoring equipment, as identified in Table 1 of this section, if the specific equipment used is identified in Table 1 of this section;

(C) If the specific equipment used is not identified in Table 1 of this section, the plan shall incorporate proposed operation and maintenance practices. These proposed operation and maintenance practices shall be submitted for approval as part of the submittal required under §63.343(d);

(D) The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur; and

(E) The plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process and control system monitoring equipment and for implementing corrective actions to address such malfunctions.

(ii) If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the operation and maintenance plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events.

(iii) Recordkeeping associated with the operation and maintenance plan is identified in §63.346(b). Reporting associated with the operation and maintenance plan is identified in §63.347 (g) and (h) and paragraph (f)(3)(iv) of this section.

(iv) If actions taken by the owner or operator during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan required by paragraph (f)(3)(i) of this section, the owner or operator shall record the actions taken for that event and shall report by phone such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event, unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator.

(v) 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 operation and maintenance plan on record to be made available for inspection, upon request, by the Administrator for a period of 5 years after each revision to the plan.

(vi) To satisfy the requirements of paragraph (f)(3) of this section, the owner or operator may use applicable standard operating procedure (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans, provided the alternative plans meet the requirements of this section.

(g) The standards in this section that apply to chromic acid baths shall not be met by using a reducing agent to change the form of chromium from hexavalent to trivalent.

**Table 1 to §63.342—Summary of Operation and Maintenance Practices**

Control technique	Operation and maintenance practices	Frequency
Composite mesh-pad (CMP) system	1. Visually inspect device to ensure there is proper drainage, no chronic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device	1. 1/quarter.
	2. Visually inspect back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist	2. 1/quarter.
	3. Visually inspect ductwork from tank to the control device to ensure there are no leaks	3. 1/quarter.
	4. Perform washdown of the composite mesh-pads in accordance with manufacturers recommendations	4. Per manufacturer.
Packed-bed scrubber (PSB)	1. Visually inspect device to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device	1. 1/quarter.
	2. Visually inspect back portion of the chevron blade mist eliminator to ensure that it is dry and there is no breakthrough of chromic acid mist	2. 1/quarter.
	3. Same as number 3 above	3. 1/quarter.
	4. Add fresh makeup water to the top of the packed bed <sup>a,b</sup>	4. Whenever makeup is added.
PBS/CMP system	1. Same as for CMP system	1. 1/quarter.
	2. Same as for CMP system	2. 1/quarter.
	3. Same as for CMP system	3. 1/quarter.
	4. Same as for CMP system	4. Per manufacturer.
Fiber-bed mist eliminator <sup>c</sup>	1. Visually inspect fiber-bed unit and prefiltering device to ensure there is proper drainage, no chromic acid buildup in the units, and no evidence of chemical attack on the structural integrity of the devices	1. 1/quarter.

Control technique	Operation and maintenance practices	Frequency
	2. Visually inspect ductwork from tank or tanks to the control device to ensure there are no leaks	2. 1/quarter.
	3. Perform washdown of fiber elements in accordance with manufacturers recommendations	3. Per manufacturer.
Air pollution control device (APCD) not listed in rule	To be proposed by the source for approval by the Administrator	To be proposed by the source for approval by the Administrator.
Monitoring Equipment		
Pitot tube	Backflush with water, or remove from the duct and rinse with fresh water. Replace in the duct and rotate 180 degrees to ensure that the same zero reading is obtained. Check pitot tube ends for damage. Replace pitot tube if cracked or fatigued	1/quarter.
Stalagmometer	Follow manufacturers recommendations	

<sup>a</sup>If greater than 50 percent of the scrubber water is drained (e.g., for maintenance purposes), makeup water may be added to the scrubber basin.

<sup>b</sup>For horizontal-flow scrubbers, top is defined as the section of the unit directly above the packing media such that the makeup water would flow perpendicular to the air flow through the packing. For vertical-flow units, the top is defined as the area downstream of the packing material such that the makeup water would flow countercurrent to the air flow through the unit.

<sup>c</sup>Work practice standards for the control device installed upstream of the fiber-bed mist eliminator to prevent plugging do not apply as long as the work practice standards for the fiber-bed unit are followed.

[60 FR 4963, Jan. 25, 1995; 60 FR 33122, June 27, 1995, as amended at 61 FR 27787, June 3, 1996; 62 FR 42920, Aug. 11, 1997; 68 FR 37347, June 23, 2003; 69 FR 42894, July 19, 2004; 71 FR 20456, Apr. 20, 2006]

**§ 63.343 Compliance provisions.**

(a) *Compliance dates.* (1) The owner or operator of an existing affected source shall comply with the emission limitations in §63.342 as follows:

(i) No later than 1 year after January 25, 1995, if the affected source is a decorative chromium electroplating tank; and

(ii) No later than 2 years after January 25, 1995, if the affected source is a hard chromium electroplating tank or a chromium anodizing tank.

(2) The owner or operator of a new or reconstructed affected source that has an initial startup after January 25, 1995, shall comply immediately upon startup of the source. The owner or operator of a new or reconstructed affected source that has an initial startup after December 16, 1993 but before January 25, 1995, shall follow the compliance schedule of §63.6(b)(1).

(3) The owner or operator of an existing area source that increases actual or potential emissions of hazardous air pollutants such that the area source becomes a major source must comply with the

provisions for existing major sources, including the reporting provisions of §63.347(g), immediately upon becoming a major source.

(4) The owner or operator of a new area source (i.e., an area source for which construction or reconstruction was commenced after December 16, 1993) that increases actual or potential emissions of hazardous air pollutants such that the area source becomes a major source must comply with the provisions for new major sources, immediately upon becoming a major source.

(5) An owner or operator of an existing hard chromium electroplating tank or tanks located at a small, hard chromium electroplating facility that increases its maximum cumulative potential rectifier capacity, or its actual cumulative rectifier capacity, such that the facility becomes a large, hard chromium electroplating facility must comply with the requirements of §63.342(c)(1)(i) for all hard chromium electroplating tanks at the facility no later than 1 year after the month in which monthly records required by §§63.342(c)(2) and 63.346(b)(12) show that the large designation is met, or by the compliance date specified in paragraph (a)(1)(ii) of this section, whichever is later.

(6) *Request for an extension of compliance.* An owner or operator of an affected source or sources that requests an extension of compliance shall do so in accordance with this paragraph and the applicable paragraphs of §63.6(i). When the owner or operator is requesting the extension for more than one affected source located at the facility, then only one request may be submitted for all affected sources at the facility.

(i) The owner or operator of an existing affected source who is unable to comply with a relevant standard under this subpart may request that the Administrator (or a State, when the State has an approved part 70 permit program and the source is required to obtain a part 70 permit under that program, or a State, when the State has been delegated the authority to implement and enforce the emission standard for that source) grant an extension allowing the owner or operator up to 1 additional year to comply with the standard for the affected source. The owner or operator of an affected source who has requested an extension of compliance under this paragraph and is otherwise required to obtain a title V permit for the source shall apply for such permit or apply to have the title V permit revised to incorporate the conditions of the extension of compliance. The conditions of an extension of compliance granted under this paragraph will be incorporated into the owner or operator's title V permit for the affected source(s) according to the provisions of 40 CFR part 70 or 40 CFR part 71, whichever is applicable.

(ii) Any request under this paragraph for an extension of compliance with a relevant standard shall be submitted in writing to the appropriate authority not later than 6 months before the affected source's compliance date as specified in this section.

(7) An owner or operator of a decorative chromium electroplating tank that uses a trivalent chromium bath that incorporates a wetting agent, and that ceases using the trivalent chromium process, must comply with the emission limitation now applicable to the tank within 1 year of switching bath operation.

(b) *Methods to demonstrate initial compliance.* (1) Except as provided in paragraphs (b)(2) and (b)(3) of this section, an owner or operator of an affected source subject to the requirements of this subpart is required to conduct an initial performance test as required under §63.7, except for hard chromium electroplaters and chromium anodizing operations in California which have until January 25, 1998, using the procedures and test methods listed in §§63.7 and 63.344.

(2) If the owner or operator of an affected source meets all of the following criteria, an initial performance test is not required to be conducted under this subpart:

(i) The affected source is a hard chromium electroplating tank, a decorative chromium electroplating tank or a chromium anodizing tank; and

(ii) A wetting agent is used in the plating or anodizing bath to inhibit chromium emissions from the affected source; and

(iii) The owner or operator complies with the applicable surface tension limit of §63.342(c)(1)(iii), (c)(2)(iii), or (d)(2) as demonstrated through the continuous compliance monitoring required by paragraph (c)(5)(ii) of this section.

(3) If the affected source is a decorative chromium electroplating tank using a trivalent chromium bath, and the owner or operator is subject to the provisions of §63.342(e), an initial performance test is not required to be conducted under this subpart.

(c) *Monitoring to demonstrate continuous compliance.* The owner or operator of an affected source subject to the emission limitations of this subpart shall conduct monitoring according to the type of air pollution control technique that is used to comply with the emission limitation. The monitoring required to demonstrate continuous compliance with the emission limitations is identified in this section for the air pollution control techniques expected to be used by the owners or operators of affected sources.

(1) *Composite mesh-pad systems.* (i) During the initial performance test, the owner or operator of an affected source, or a group of affected sources under common control, complying with the emission limitations in §63.342 through the use of a composite mesh-pad system shall determine the outlet chromium concentration using the test methods and procedures in §63.344(c), and shall establish as a site-specific operating parameter the pressure drop across the system, setting the value that corresponds to compliance with the applicable emission limitation, using the procedures in §63.344(d)(5). An owner or operator may conduct multiple performance tests to establish a range of compliant pressure drop values, or may set as the compliant value the average pressure drop measured over the three test runs of one performance test and accept  $\pm 2$  inches of water column from this value as the compliant range.

(ii) On and after the date on which the initial performance test is required to be completed under §63.7, except for hard chromium electroplaters and chromium anodizing operations in California, which have until January 25, 1998, the owner or operator of an affected source, or group of affected sources under common control, shall monitor and record the pressure drop across the composite mesh-pad system once each day that any affected source is operating. To be in compliance with the standards, the composite mesh-pad system shall be operated within  $\pm 2$  inches of water column of the pressure drop value established during the initial performance test, or shall be operated within the range of compliant values for pressure drop established during multiple performance tests.

(iii) The owner or operator of an affected source complying with the emission limitations in §63.343 through the use of a composite mesh-pad system may repeat the performance test and establish as a new site-specific operating parameter the pressure drop across the composite mesh-pad system according to the requirements in paragraphs (c)(1)(i) or (ii) of this section. To establish a new site-specific operating parameter for pressure drop, the owner or operator shall satisfy the requirements specified in paragraphs (c)(1)(iii)(A) through (D) of this section.

(A) Determine the outlet chromium concentration using the test methods and procedures in §63.344(c);

(B) Establish the site-specific operating parameter value using the procedures §63.344(d)(5);

(C) Satisfy the recordkeeping requirements in §63.346(b)(6) through (8); and

(D) Satisfy the reporting requirements in §63.347(d) and (f).

(iv) The requirement to operate a composite mesh-pad system within the range of pressure drop values established under paragraphs (c)(1)(i) through (iii) of this section does not apply during automatic washdown cycles of the composite mesh-pad system.

(2) *Packed-bed scrubber systems.* (i) During the initial performance test, the owner or operator of an affected source, or group of affected sources under common control, complying with the emission limitations in §63.342 through the use of a packed-bed scrubber system shall determine the outlet chromium concentration using the procedures in §63.344(c), and shall establish as site-specific operating parameters the pressure drop across the system and the velocity pressure at the common inlet of the control device, setting the value that corresponds to compliance with the applicable emission limitation using the procedures in §63.344(d) (4) and (5). An owner or operator may conduct multiple performance tests to establish a range of compliant operating parameter values. Alternatively, the owner or operator may set as the compliant value the average pressure drop and inlet velocity pressure measured over the three test runs of one performance test, and accept  $\pm 1$  inch of water column from the pressure drop value and  $\pm 10$  percent from the velocity pressure value as the compliant range.

(ii) On and after the date on which the initial performance test is required to be completed under §63.7, except for hard chromium electroplaters and chromium anodizing operations in California which have until January 25, 1998, the owner or operator of an affected source, or group of affected sources under common control, shall monitor and record the velocity pressure at the inlet to the packed-bed system and the pressure drop across the scrubber system once each day that any affected source is operating. To be in compliance with the standards, the scrubber system shall be operated within  $\pm 10$  percent of the velocity pressure value established during the initial performance test, and within  $\pm 1$  inch of water column of the pressure drop value established during the initial performance test, or within the range of compliant operating parameter values established during multiple performance tests.

(3) *Packed-bed scrubber/composite mesh-pad system.* The owner or operator of an affected source, or group of affected sources under common control, that uses a packed-bed scrubber in conjunction with a composite mesh-pad system to meet the emission limitations of §63.342 shall comply with the monitoring requirements for composite mesh-pad systems as identified in paragraph (c)(1) of this section.

(4) *Fiber-bed mist eliminator.* (i) During the initial performance test, the owner or operator of an affected source, or group of affected sources under common control, complying with the emission limitations in §63.342 through the use of a fiber-bed mist eliminator shall determine the outlet chromium concentration using the procedures in §63.344(c), and shall establish as a site-specific operating parameter the pressure drop across the fiber-bed mist eliminator and the pressure drop across the control device installed upstream of the fiber bed to prevent plugging, setting the value that corresponds to compliance with the applicable emission limitation using the procedures in §63.344(d)(5). An owner or operator may conduct multiple performance tests to establish a range of compliant pressure drop values, or may set as the compliant value the average pressure drop measured over the three test runs of one performance test and accept  $\pm 1$  inch of water column from this value as the compliant range.

(ii) On and after the date on which the initial performance test is required to be completed under §63.7, except for hard chromium electroplaters and chromium anodizing operations in California which have until January 25, 1998, the owner or operator of an affected source, or group of affected sources under common control, shall monitor and record the pressure drop across the fiber-bed mist eliminator, and the control device installed upstream of the fiber bed to prevent plugging, once each day that any affected source is operating. To be in compliance with the standards, the fiber-bed mist eliminator and the upstream control device shall be operated within  $\pm 1$  inch of water column of the pressure drop value established during the initial performance test, or shall be operated within the range of compliant values for pressure drop established during multiple performance tests.

(5) *Wetting agent-type or combination wetting agent-type/foam blanket fume suppressants.* (i) During the initial performance test, the owner or operator of an affected source complying with the emission limitations in §63.342 through the use of a wetting agent in the electroplating or anodizing bath shall

determine the outlet chromium concentration using the procedures in §63.344(c). The owner or operator shall establish as the site-specific operating parameter the surface tension of the bath using Method 306B, appendix A of this part, setting the maximum value that corresponds to compliance with the applicable emission limitation. In lieu of establishing the maximum surface tension during the performance test, the owner or operator may accept 45 dynes/cm as measured by a stalagmometer or 35 dynes/cm as measured by a tensiometer as the maximum surface tension value that corresponds to compliance with the applicable emission limitation. However, the owner or operator is exempt from conducting a performance test only if the criteria of paragraph (b)(2) of this section are met.

(ii) On and after the date on which the initial performance test is required to be completed under §63.7, except for hard chromium electroplaters and chromium anodizing operations in California, which have until January 25, 1998, the owner or operator of an affected source shall monitor the surface tension of the electroplating or anodizing bath. Operation of the affected source at a surface tension greater than the value established during the performance test, or greater than 45 dynes/cm as measured by a stalagmometer or 35 dynes/cm as measured by a tensiometer if the owner or operator is using this value in accordance with paragraph (c)(5)(i) of this section, shall constitute noncompliance with the standards. The surface tension shall be monitored according to the following schedule:

(A) The surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer or a tensiometer as specified in Method 306B, appendix A of this part.

(B) The time between monitoring can be increased if there have been no exceedances. The surface tension shall be measured once every 4 hours of tank operation for the first 40 hours of tank operation after the compliance date. Once there are no exceedances during 40 hours of tank operation, surface tension measurement may be conducted once every 8 hours of tank operation. Once there are no exceedances during 40 hours of tank operation, surface tension measurement may be conducted once every 40 hours of tank operation on an ongoing basis, until an exceedance occurs. The minimum frequency of monitoring allowed by this subpart is once every 40 hours of tank operation.

(C) Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be resumed. A subsequent decrease in frequency shall follow the schedule laid out in paragraph (c)(5)(ii)(B) of this section. For example, if an owner or operator had been monitoring an affected source once every 40 hours and an exceedance occurs, subsequent monitoring would take place once every 4 hours of tank operation. Once an exceedance does not occur for 40 hours of tank operation, monitoring can occur once every 8 hours of tank operation. Once an exceedance does not occur for 40 hours of tank operation on this schedule, monitoring can occur once every 40 hours of tank operation.

(iii) Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed following the procedures of paragraphs (c)(5)(ii) (B) and (C) of this section.

(6) *Foam blanket-type fume suppressants.* (i) During the initial performance test, the owner or operator of an affected source complying with the emission limitations in §63.342 through the use of a foam blanket in the electroplating or anodizing bath shall determine the outlet chromium concentration using the procedures in §63.344(c), and shall establish as the site-specific operating parameter the thickness of the foam blanket, setting the minimum thickness that corresponds to compliance with the applicable emission limitation. In lieu of establishing the minimum foam blanket thickness during the performance test, the owner or operator may accept 2.54 centimeters (1 inch) as the minimum foam blanket thickness that corresponds to compliance with the applicable emission limitation. All foam blanket measurements must be taken in close proximity to the workpiece or cathode area in the plating tank(s).

(ii) On and after the date on which the initial performance test is required to be completed under §63.7, except for hard chromium electroplaters and chromium anodizing operations in California which have until

January 25, 1998, the owner or operator of an affected source shall monitor the foam blanket thickness of the electroplating or anodizing bath. Operation of the affected source at a foam blanket thickness less than the value established during the performance test, or less than 2.54 cm (1 inch) if the owner or operator is using this value in accordance with paragraph (c)(6)(i) of this section, shall constitute noncompliance with the standards. The foam blanket thickness shall be measured according to the following schedule:

(A) The foam blanket thickness shall be measured once every 1 hour of tank operation.

(B) The time between monitoring can be increased if there have been no exceedances. The foam blanket thickness shall be measured once every hour of tank operation for the first 40 hours of tank operation after the compliance date. Once there are no exceedances for 40 hours of tank operation, foam blanket thickness measurement may be conducted once every 4 hours of tank operation. Once there are no exceedances during 40 hours of tank operation, foam blanket thickness measurement may be conducted once every 8 hours of tank operation on an ongoing basis, until an exceedance occurs. The minimum frequency of monitoring allowed by this subpart is once per 8 hours of tank operation.

(C) Once an exceedance occurs as indicated through foam blanket thickness monitoring, the original monitoring schedule of once every hour must be resumed. A subsequent decrease in frequency shall follow the schedule laid out in paragraph (c)(6)(ii)(B) of this section. For example, if an owner or operator had been monitoring an affected source once every 8 hours and an exceedance occurs, subsequent monitoring would take place once every hour of tank operation. Once an exceedance does not occur for 40 hours of tank operation, monitoring can occur once every 4 hours of tank operation. Once an exceedance does not occur for 40 hours of tank operation on this schedule, monitoring can occur once every 8 hours of tank operation.

(iii) Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every hour must be resumed, with a decrease in monitoring frequency allowed following the procedures of paragraphs (c)(6)(ii) (B) and (C) of this section.

(7) *Fume suppressant/add-on control device.* (i) If the owner or operator of an affected source uses both a fume suppressant and add-on control device and both are needed to comply with the applicable emission limit, monitoring requirements as identified in paragraphs (c) (1) through (6) of this section, and the work practice standards of Table 1 of §63.342, apply for each of the control techniques used.

(ii) If the owner or operator of an affected source uses both a fume suppressant and add-on control device, but only one of these techniques is needed to comply with the applicable emission limit, monitoring requirements as identified in paragraphs (c) (1) through (6) of this section, and work practice standards of Table 1 of §63.342, apply only for the control technique used to achieve compliance.

(8) *Use of an alternative monitoring method.* (i) Requests and approvals of alternative monitoring methods shall be considered in accordance with §63.8(f)(1), (f)(3), (f)(4), and (f)(5).

(ii) After receipt and consideration of an application for an alternative monitoring method, the Administrator may approve alternatives to any monitoring methods or procedures of this subpart including, but not limited to, the following:

(A) Alternative monitoring requirements when installation or use of monitoring devices specified in this subpart would not provide accurate measurements due to interferences caused by substances within the effluent gases; or

(B) Alternative locations for installing monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.

(d) An owner or operator who uses an air pollution control device not listed in this section shall submit a description of the device, test results collected in accordance with §63.344(c) verifying the performance of the device for reducing chromium emissions to the atmosphere to the level required by this subpart, a copy of the operation and maintenance plan referenced in §63.342(f) including operation and maintenance practices, and appropriate operating parameters that will be monitored to establish continuous compliance with the standards. The monitoring plan submitted identifying the continuous compliance monitoring is subject to the Administrator's approval.

[60 FR 4963, Jan. 25, 1995; 60 FR 33122, June 27, 1995, as amended at 62 FR 42920, Aug. 11, 1997; 68 FR 37347, June 23, 2003; 69 FR 42895, July 19, 2004]

**§ 63.344 Performance test requirements and test methods.**

(a) *Performance test requirements.* Performance tests shall be conducted using the test methods and procedures in this section and §63.7. Performance test results shall be documented in complete test reports that contain the information required by paragraphs (a)(1) through (a)(9) of this section. The test plan to be followed shall be made available to the Administrator prior to the testing, if requested.

- (1) A brief process description;
- (2) Sampling location description(s);
- (3) A description of sampling and analytical procedures and any modifications to standard procedures;
- (4) Test results;
- (5) Quality assurance procedures and results;
- (6) Records of operating conditions during the test, preparation of standards, and calibration procedures;
- (7) Raw data sheets for field sampling and field and laboratory analyses;
- (8) Documentation of calculations; and
- (9) Any other information required by the test method.

(b)(1) If the owner or operator of an affected source conducts performance testing at startup to obtain an operating permit in the State in which the affected source is located, the results of such testing may be used to demonstrate compliance with this subpart if:

- (i) The test methods and procedures identified in paragraph (c) of this section were used during the performance test;
- (ii) The performance test was conducted under representative operating conditions for the source;
- (iii) The performance test report contains the elements required by paragraph (a) of this section; and
- (iv) The owner or operator of the affected source for which the performance test was conducted has sufficient data to establish the operating parameter value(s) that correspond to compliance with the standards, as required for continuous compliance monitoring under §63.343(c).

(2) The results of tests conducted prior to December 1991 in which Method 306A, appendix A of this part, was used to demonstrate the performance of a control technique are not acceptable.

(c) *Test methods.* Each owner or operator subject to the provisions of this subpart and required by §63.343(b) to conduct an initial performance test shall use the test methods identified in this section to demonstrate compliance with the standards in §63.342.

(1) Method 306 or Method 306A, "Determination of Chromium Emissions From Decorative and Hard Chromium Electroplating and Anodizing Operations," appendix A of this part shall be used to determine the chromium concentration from hard or decorative chromium electroplating tanks or chromium anodizing tanks. The sampling time and sample volume for each run of Methods 306 and 306A, appendix A of this part shall be at least 120 minutes and 1.70 dscm (60 dscf), respectively. Methods 306 and 306A, appendix A of this part allow the measurement of either total chromium or hexavalent chromium emissions. For the purposes of this standard, sources using chromic acid baths can demonstrate compliance with the emission limits of §63.342 by measuring either total chromium or hexavalent chromium. Hence, the hexavalent chromium concentration measured by these methods is equal to the total chromium concentration for the affected operations.

(2) The California Air Resources Board (CARB) Method 425 (which is available by contacting the California Air Resources Board, 1102 Q Street, Sacramento, California 95814) may be used to determine the chromium concentration from hard and decorative chromium electroplating tanks and chromium anodizing tanks if the following conditions are met:

(i) If a colorimetric analysis method is used, the sampling time and volume shall be sufficient to result in 33 to 66 micrograms of catch in the sampling train.

(ii) If Atomic Absorption Graphite Furnace (AAGF) or Ion Chromatography with a Post-column Reactor (ICPCR) analyses were used, the sampling time and volume should be sufficient to result in a sample catch that is 5 to 10 times the minimum detection limit of the analytical method (i.e., 1.0 microgram per liter of sample for AAGF and 0.5 microgram per liter of sample for ICPCR).

(iii) In the case of either paragraph (c)(2) (i) or (ii) of this section, a minimum of 3 separate runs must be conducted. The other requirements of §63.7 that apply to affected sources, as indicated in Table 1 of this subpart, must also be met.

(3) Method 306B, "Surface Tension Measurement and Recordkeeping for Tanks Used at Decorative Chromium Electroplating and Anodizing Facilities," appendix A of this part shall be used to measure the surface tension of electroplating and anodizing baths.

(4) Alternate test methods may also be used if the method has been validated using Method 301, appendix A of this part and if approved by the Administrator. Procedures for requesting and obtaining approval are contained in §63.7(f).

(d) *Establishing site-specific operating parameter values.* (1) Each owner or operator required to establish site-specific operating parameters shall follow the procedures in this section.

(2) All monitoring equipment shall be installed such that representative measurements of emissions or process parameters from the affected source are obtained. For monitoring equipment purchased from a vendor, verification of the operational status of the monitoring equipment shall include execution of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system.

(i) Specifications for differential pressure measurement devices used to measure velocity pressure shall be in accordance with section 2.2 of Method 2 (40 CFR part 60, appendix A).

(ii) Specification for differential pressure measurement devices used to measure pressure drop across a control system shall be in accordance with manufacturer's accuracy specifications.

(3) The surface tension of electroplating and anodizing baths shall be measured using Method 306B, "Surface Tension Measurement and Recordkeeping for Tanks used at Decorative Chromium Electroplating and Anodizing Facilities," appendix A of this part. This method should also be followed when wetting agent type or combination wetting agent/foam blanket type fume suppressants are used to control chromium emissions from a hard chromium electroplating tank and surface tension measurement is conducted to demonstrate continuous compliance.

(4) The owner or operator of a source required to measure the velocity pressure at the inlet to an add-on air pollution control device in accordance with §63.343(c)(2), shall establish the site-specific velocity pressure as follows:

(i) Locate a velocity traverse port in a section of straight duct that connects the hooding on the plating tank or tanks with the control device. The port shall be located as close to the control system as possible, and shall be placed a minimum of 2 duct diameters downstream and 0.5 diameter upstream of any flow disturbance such as a bend, expansion, or contraction (see Method 1, 40 CFR part 60, appendix A). If 2.5 diameters of straight duct work does not exist, locate the port 0.8 of the duct diameter downstream and 0.2 of the duct diameter upstream from any flow disturbance.

(ii) A 12-point velocity traverse of the duct to the control device shall be conducted along a single axis according to Method 2 (40 CFR part 60, appendix A) using an S-type pitot tube; measurement of the barometric pressure and duct temperature at each traverse point is not required, but is suggested. Mark the S-type pitot tube as specified in Method 1 (40 CFR part 60, appendix A) with 12 points. Measure the velocity pressure ( $\Delta p$ ) values for the velocity points and record. Determine the square root of the individual velocity point  $\Delta p$  values and average. The point with the square root value that comes closest to the average square root value is the point of average velocity. The  $\Delta p$  value measured for this point during the performance test will be used as the reference for future monitoring.

(5) The owner or operator of a source required to measure the pressure drop across the add-on air pollution control device in accordance with §63.343(c) (1) through (4) may establish the pressure drop in accordance with the following guidelines:

(i) Pressure taps shall be installed at any of the following locations:

(A) At the inlet and outlet of the control system. The inlet tap should be installed in the ductwork just prior to the control device and the corresponding outlet pressure tap should be installed on the outlet side of the control device prior to the blower or on the downstream side of the blower;

(B) On each side of the packed bed within the control system or on each side of each mesh pad within the control system; or

(C) On the front side of the first mesh pad and back side of the last mesh pad within the control system.

(ii) Pressure taps shall be sited at locations that are:

(A) Free from pluggage as possible and away from any flow disturbances such as cyclonic demisters.

(B) Situated such that no air infiltration at measurement site will occur that could bias the measurement.

(iii) Pressure taps shall be constructed of either polyethylene, polybutylene, or other nonreactive materials.

(iv) Nonreactive plastic tubing shall be used to connect the pressure taps to the device used to measure pressure drop.

(v) Any of the following pressure gauges can be used to monitor pressure drop: a magnehelic gauge, an inclined manometer, or a "U" tube manometer.

(vi) Prior to connecting any pressure lines to the pressure gauge(s), each gauge should be zeroed. No calibration of the pressure gauges is required.

(e) *Special compliance provisions for multiple sources controlled by a common add-on air pollution control device.* (1) This section identifies procedures for measuring the outlet chromium concentration from an add-on air pollution control device that is used to control multiple sources that may or may not include sources not affected by this subpart.

(2) When multiple affected sources performing the same type of operation (e.g., all are performing hard chromium electroplating), and subject to the same emission limitation, are controlled with an add-on air pollution control device that is not controlling emissions from any other type of affected operation or from any nonaffected sources, the applicable emission limitation identified in §63.342 must be met at the outlet of the add-on air pollution control device.

(3) When multiple affected sources performing the same type of operation and subject to the same emission limitation are controlled with a common add-on air pollution control device that is also controlling emissions from sources not affected by these standards, the following procedures should be followed to determine compliance with the applicable emission limitation in §63.342:

(i) Calculate the cross-sectional area of each inlet duct (i.e., uptakes from each hood) including those not affected by the standard.

(ii) Determine the total sample time per test run by dividing the total inlet area from all tanks connected to the control system by the total inlet area for all ducts associated with affected sources, and then multiply this number by 2 hours. The calculated time is the minimum sample time required per test run.

(iii) Perform Method 306 testing and calculate an outlet mass emission rate.

(iv) Determine the total ventilation rate from the affected sources by using equation 1:

$$VR_{tot} \times \frac{IDA_i}{\sum IA_{total}} = VR_{inlet} \quad (1)$$

where  $VR_{tot}$  is the average total ventilation rate in dscm/min for the three test runs as determined at the outlet by means of the Method 306 testing;  $IDA_i$  is the total inlet area for all ducts associated with affected sources;  $IA_{total}$  is the sum of all inlet duct areas from both affected and nonaffected sources; and  $VR_{inlet}$  is the total ventilation rate from all inlet ducts associated with affected sources.

(v) Establish the allowable mass emission rate of the system ( $AMR_{sys}$ ) in milligrams of total chromium per hour (mg/hr) using equation 2:

$$\sum VR_{inlet} \times EL \times 60 \text{ minutes/hours} = AMR_{sys} \quad (2)$$

where  $\Sigma VR_{inlet}$  is the total ventilation rate in dscm/min from the affected sources, and EL is the applicable emission limitation from §63.342 in mg/dscm. The allowable mass emission rate ( $AMR_{sys}$ ) calculated from equation 2 should be equal to or more than the outlet three-run average mass emission rate determined from Method 306 testing in order for the source to be in compliance with the standard.

(4) When multiple affected sources performing different types of operations (e.g., hard chromium electroplating, decorative chromium electroplating, or chromium anodizing) are controlled by a common add-on air pollution control device that may or may not also be controlling emissions from sources not affected by these standards, or if the affected sources controlled by the common add-on air pollution control device perform the same operation but are subject to different emission limitations (e.g., because one is a new hard chromium plating tank and one is an existing small, hard chromium plating tank), the following procedures should be followed to determine compliance with the applicable emission limitation in §63.342:

(i) Follow the steps outlined in paragraphs (e)(3)(i) through (e)(3)(iii) of this section.

(ii) Determine the total ventilation rate for each type of affected source using equation 3:

$$VR_{wt} \times \frac{IDA_{i,a}}{\Sigma IA_{total}} = VR_{inlet,a} \quad (3)$$

where  $VR_{tot}$  is the average total ventilation rate in dscm/min for the three test runs as determined at the outlet by means of the Method 306 testing;  $IDA_{i,a}$  is the total inlet duct area for all ducts conveying chromic acid from each type of affected source performing the same operation, or each type of affected source subject to the same emission limitation;  $IA_{total}$  is the sum of all duct areas from both affected and nonaffected sources; and  $VR_{inlet,a}$  is the total ventilation rate from all inlet ducts conveying chromic acid from each type of affected source performing the same operation, or each type of affected source subject to the same emission limitation.

(iii) Establish the allowable mass emission rate in mg/hr for each type of affected source that is controlled by the add-on air pollution control device using equation 4, 5, 6, or 7 as appropriate:

$$VR_{hc1} \times EL_{hc1} \times 60 \text{ minutes/hour} = AMR_{hc1} \quad (4)$$

$$VR_{hc2} \times EL_{hc2} \times 60 \text{ minutes/hour} = AMR_{hc2} \quad (5)$$

$$VR_{dc} \times EL_{dc} \times 60 \text{ minutes/hour} = AMR_{dc} \quad (6)$$

$$VR_{ca} \times EL_{ca} \times 60 \text{ minutes/hour} = AMR_{ca} \quad (7)$$

where “hc” applies to the total of ventilation rates for all hard chromium electroplating tanks subject to the same emission limitation, “dc” applies to the total of ventilation rates for the decorative chromium electroplating tanks, “ca” applies to the total of ventilation rates for the chromium anodizing tanks, and EL is the applicable emission limitation from §63.342 in mg/dscm. There are two equations for hard chromium electroplating tanks because different emission limitations may apply (e.g., a new tank versus an existing, small tank).

(iv) Establish the allowable mass emission rate (AMR) in mg/hr for the system using equation 8, including each type of affected source as appropriate:

$$AMR_{hc1} + AMR_{hc2} + AMR_{dc} + AMR_{ca} = AMR_{sys} \quad (8)$$

The allowable mass emission rate calculated from equation 8 should be equal to or more than the outlet three-run average mass emission rate determined from Method 306 testing in order for the source to be in compliance with the standards.

(5) Each owner or operator that uses the special compliance provisions of this paragraph to demonstrate compliance with the emission limitations of §63.342 shall submit the measurements and calculations to support these compliance methods with the notification of compliance status required by §63.347(e).

(6) Each owner or operator that uses the special compliance provisions of this section to demonstrate compliance with the emission limitations of §63.342 shall repeat these procedures if a tank is added or removed from the control system regardless of whether that tank is a nonaffected source. If the new nonaffected tank replaces an existing nonaffected tank of the same size and is connected to the control system through the same size inlet duct then this procedure does not have to be repeated.

(f) *Compliance provisions for the mass rate emission standard for enclosed hard chromium electroplating tanks.* (1) This section identifies procedures for calculating the maximum allowable mass emission rate for owners or operators of affected sources who choose to meet the mass emission rate standard in §63.342(c)(2)(iv) or (v).

(i)(A) The owner or operator of an enclosed hard chromium electroplating tank that is an affected source other than an existing affected source located at a small hard chromium electroplating facility who chooses to meet the mass emission rate standard in §63.342(c)(2)(iv) shall determine compliance by not allowing the mass rate of total chromium in the exhaust gas stream discharged to the atmosphere to exceed the maximum allowable mass emission rate calculated using equation 9:

$$\text{MAMER} = \text{ETSA} \times K \times 0.015 \text{ mg/dscm} \quad (9)$$

Where:

MAMER = the alternative emission rate for enclosed hard chromium electroplating tanks in mg/hr.

ETSA = the hard chromium electroplating tank surface area in square feet(ft<sup>2</sup>).

K = a conversion factor, 425 dscm/(ft<sup>2</sup> × hr).

(B) Compliance with the alternative mass emission limit is demonstrated if the three-run average mass emission rate determined from Method 306 testing is less than or equal to the maximum allowable mass emission rate calculated from equation 9.

(ii)(A) The owner or operator of an enclosed hard chromium electroplating tank that is an existing affected source located at a small hard chromium electroplating facility who chooses to meet the mass emission rate standard in §63.342(c)(2)(v) shall determine compliance by not allowing the mass rate of total chromium in the exhaust gas stream discharged to the atmosphere to exceed the maximum allowable mass emission rate calculated using equation 10:

$$\text{MAMER} = \text{ETSA} \times K \times 0.03 \text{ mg/dscm.} \quad (10)$$

(B) Compliance with the alternative mass emission limit is demonstrated if the three-run average mass emission rate determined from testing using Method 306 of appendix A to part 63 is less than or equal to the maximum allowable mass emission rate calculated from equation 10.

[60 FR 4963, Jan. 25, 1995, as amended at 61 FR 27787, June 3, 1996; 69 FR 42896, July 19, 2004]

**§ 63.345 Provisions for new and reconstructed sources.**

(a) This section identifies the preconstruction review requirements for new and reconstructed affected sources that are subject to, or become subject to, this subpart.

(b) *New or reconstructed affected sources.* The owner or operator of a new or reconstructed affected source is subject to §63.5(a), (b)(1), (b)(5), (b)(6), and (f)(1), as well as the provisions of this paragraph.

(1) After January 25, 1995, whether or not an approved permit program is effective in the State in which an affected source is (or would be) located, no person may construct a new affected source or reconstruct an affected source subject to this subpart, or reconstruct a source such that it becomes an affected source subject to this subpart, without submitting a notification of construction or reconstruction to the Administrator. The notification shall contain the information identified in paragraphs (b) (2) and (3) of this section, as appropriate.

(2) The notification of construction or reconstruction required under paragraph (b)(1) of this section shall include:

(i) The owner or operator's name, title, and address;

(ii) The address (i.e., physical location) or proposed address of the affected source if different from the owner's or operator's;

(iii) A notification of intention to construct a new affected source or make any physical or operational changes to an affected source that may meet or has been determined to meet the criteria for a reconstruction as defined in §63.2;

(iv) An identification of subpart N of this part as the basis for the notification;

(v) The expected commencement and completion dates of the construction or reconstruction;

(vi) The anticipated date of (initial) startup of the affected source;

(vii) The type of process operation to be performed (hard or decorative chromium electroplating, or chromium anodizing);

(viii) A description of the air pollution control technique to be used to control emissions from the affected source, such as preliminary design drawings and design capacity if an add-on air pollution control device is used; and

(ix) An estimate of emissions from the source based on engineering calculations and vendor information on control device efficiency, expressed in units consistent with the emission limits of this subpart. Calculations of emission estimates should be in sufficient detail to permit assessment of the validity of the calculations.

(3) If a reconstruction is to occur, the notification required under paragraph (b)(1) of this section shall include the following in addition to the information required in paragraph (b)(2) of this section:

(i) A brief description of the affected source and the components to be replaced;

(ii) A brief description of the present and proposed emission control technique, including the information required by paragraphs (b)(2) (viii) and (ix) of this section;

(iii) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new source;

(iv) The estimated life of the affected source after the replacements; and

(v) A discussion of any economic or technical limitations the source may have in complying with relevant standards or other requirements after the proposed replacements. The discussion shall be sufficiently detailed to demonstrate to the Administrator's satisfaction that the technical or economic limitations affect the source's ability to comply with the relevant standard and how they do so.

(vi) If in the notification of reconstruction, the owner or operator designates the affected source as a reconstructed source and declares that there are no economic or technical limitations to prevent the source from complying with all relevant standards or requirements, the owner or operator need not submit the information required in paragraphs (b)(3) (iii) through (v) of this section.

(4) The owner or operator of a new or reconstructed affected source that submits a notification in accordance with paragraphs (b) (1) through (3) of this section is not subject to approval by the Administrator. Construction or reconstruction is subject only to notification and can begin upon submission of a complete notification.

(5) *Submittal timeframes.* After January 25, 1995, whether or not an approved permit program is effective in the State in which an affected source is (or would be) located, an owner or operator of a new or reconstructed affected source shall submit the notification of construction or reconstruction required by paragraph (b)(1) of this section according to the following schedule:

(i) If construction or reconstruction commences after January 25, 1995, the notification shall be submitted as soon as practicable before the construction or reconstruction is planned to commence.

(ii) If the construction or reconstruction had commenced and initial startup had not occurred before January 25, 1995, the notification shall be submitted as soon as practicable before startup but no later than 60 days after January 25, 1995.

#### **§ 63.346 Recordkeeping requirements.**

(a) The owner or operator of each affected source subject to these standards shall fulfill all recordkeeping requirements outlined in this section and in the General Provisions to 40 CFR part 63, according to the applicability of subpart A of this part as identified in Table 1 of this subpart.

(b) The owner or operator of an affected source subject to the provisions of this subpart shall maintain the following records for such source:

(1) Inspection records for the add-on air pollution control device, if such a device is used, and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of §63.342(f) and Table 1 of §63.342 have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection.

(2) Records of all maintenance performed on the affected source, the add-on air pollution control device, and monitoring equipment;

(3) Records of the occurrence, duration, and cause (if known) of each malfunction of process, add-on air pollution control, and monitoring equipment;

- (4) Records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan;
  - (5) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan required by §63.342(f)(3);
  - (6) Test reports documenting results of all performance tests;
  - (7) All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance with the special compliance procedures of §63.344(e);
  - (8) Records of monitoring data required by §63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected;
  - (9) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control, or monitoring equipment;
  - (10) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control, or monitoring equipment;
  - (11) The total process operating time of the affected source during the reporting period;
  - (12) Records of the actual cumulative rectifier capacity of hard chromium electroplating tanks at a facility expended during each month of the reporting period, and the total capacity expended to date for a reporting period, if the owner or operator is using the actual cumulative rectifier capacity to determine facility size in accordance with §63.342(c)(2);
  - (13) For sources using fume suppressants to comply with the standards, records of the date and time that fume suppressants are added to the electroplating or anodizing bath;
  - (14) For sources complying with §63.342(e), records of the bath components purchased, with the wetting agent clearly identified as a bath constituent contained in one of the components;
  - (15) Any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements, if the source has been granted a waiver under §63.10(f); and
  - (16) All documentation supporting the notifications and reports required by §63.9, §63.10, and §63.347.
- (c) All records shall be maintained for a period of 5 years in accordance with §63.10(b)(1).

**§ 63.347 Reporting requirements.**

- (a) The owner or operator of each affected source subject to these standards shall fulfill all reporting requirements outlined in this section and in the General Provisions to 40 CFR part 63, according to the applicability of subpart A as identified in Table 1 of this subpart. These reports shall be made to the Administrator at the appropriate address as identified in §63.13 or to the delegated State authority.
- (1) Reports required by subpart A of this part and this section may be sent by U.S. mail, fax, or by another courier.

(i) Submittals sent by U.S. mail shall be postmarked on or before the specified date.

(ii) Submittals sent by other methods shall be received by the Administrator on or before the specified date.

(2) If acceptable to both the Administrator and the owner or operator of an affected source, reports may be submitted on electronic media.

(b) The reporting requirements of this section apply to the owner or operator of an affected source when such source becomes subject to the provisions of this subpart.

(c) *Initial notifications.* (1) The owner or operator of an affected source that has an initial startup before January 25, 1995, shall notify the Administrator in writing that the source is subject to this subpart. The notification shall be submitted no later than 180 calendar days after January 25, 1995, and shall contain the following information:

(i) The name, title, and address of the owner or operator;

(ii) The address (i.e., physical location) of each affected source;

(iii) A statement that subpart N of this part is the basis for this notification;

(iv) Identification of the applicable emission limitation and compliance date for each affected source;

(v) A brief description of each affected source, including the type of process operation performed;

(vi) For sources performing hard chromium electroplating, the maximum potential cumulative potential rectifier capacity;

(vii) For sources performing hard chromium electroplating, a statement of whether the affected source(s) is located at a small or a large, hard chromium electroplating facility and whether this will be demonstrated through actual or maximum potential cumulative rectifier capacity;

(viii) For sources performing hard chromium electroplating, a statement of whether the owner or operator of an affected source(s) will limit the maximum potential cumulative rectifier capacity in accordance with §63.342(c)(2) such that the hard chromium electroplating facility is considered small; and

(ix) A statement of whether the affected source is located at a major source or an area source as defined in §63.2.

(2) The owner or operator of a new or reconstructed affected source that has an initial startup after January 25, 1995 shall submit an initial notification (in addition to the notification of construction or reconstruction required by §63.345(b) as follows:

(i) A notification of the date when construction or reconstruction was commenced, shall be submitted simultaneously with the notification of construction or reconstruction, if construction or reconstruction was commenced before January 25, 1995;

(ii) A notification of the date when construction or reconstruction was commenced, shall be submitted no later than 30 calendar days after such date, if construction or reconstruction was commenced after January 25, 1995; and

(iii) A notification of the actual date of startup of the source shall be submitted within 30 calendar days after such date.

(d) *Notification of performance test.* (1) 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 test is scheduled to begin to allow the Administrator to have an observer present during the test. Observation of the performance test by the Administrator is optional.

(2) In the event the owner or operator is unable to conduct the performance test as scheduled, the provisions of §63.7(b)(2) apply.

(e) *Notification of compliance status.* (1) A notification of compliance status is required each time that an affected source becomes subject to the requirements of this subpart.

(2) If the State in which the source is located has not been delegated the authority to implement the rule, each time a notification of compliance status is required under this part, the owner or operator of an affected source shall submit to the Administrator a notification of compliance status, signed by the responsible official (as defined in §63.2) who shall certify its accuracy, attesting to whether the affected source has complied with this subpart. If the State has been delegated the authority, the notification of compliance status shall be submitted to the appropriate authority. The notification shall list for each affected source:

(i) The applicable emission limitation and the methods that were used to determine compliance with this limitation;

(ii) If a performance test is required by this subpart, the test report documenting the results of the performance test, which contains the elements required by §63.344(a), including measurements and calculations to support the special compliance provisions of §63.344(e) if these are being followed;

(iii) The type and quantity of hazardous air pollutants emitted by the source reported in mg/dscm or mg/hr if the source is using the special provisions of §63.344(e) to comply with the standards. (If the owner or operator is subject to the construction and reconstruction provisions of §63.345 and had previously submitted emission estimates, the owner or operator shall state that this report corrects or verifies the previous estimate.) For sources not required to conduct a performance test in accordance with §63.343(b), the surface tension measurement may fulfill this requirement;

(iv) For each monitored parameter for which a compliant value is to be established under §63.343(c), the specific operating parameter value, or range of values, that corresponds to compliance with the applicable emission limit;

(v) The methods that will be used to determine continuous compliance, including a description of monitoring and reporting requirements, if methods differ from those identified in this subpart;

(vi) A description of the air pollution control technique for each emission point;

(vii) A statement that the owner or operator has completed and has on file the operation and maintenance plan as required by the work practice standards in §63.342(f);

(viii) If the owner or operator is determining facility size based on actual cumulative rectifier capacity in accordance with §63.342(c)(2), records to support that the facility is small. For existing sources, records from any 12-month period preceding the compliance date shall be used or a description of how operations will change to meet a small designation shall be provided. For new sources, records of projected rectifier capacity for the first 12-month period of tank operation shall be used;

(ix) A statement by the owner or operator of the affected source as to whether the source has complied with the provisions of this subpart.

(3) For sources required to conduct a performance test by §63.343(b), the notification of compliance status shall be submitted to the Administrator no later than 90 calendar days following completion of the compliance demonstration required by §63.7 and §63.343(b).

(4) For sources that are not required to complete a performance test in accordance with §63.343(b), the notification of compliance status shall be submitted to the Administrator no later than 30 days after the compliance date specified in §63.343(a), except the date on which sources in California shall monitor the surface tension of the anodizing bath is extended to January 25, 1998.

(f) *Reports of performance test results.* (1) If the State in which the source is located has not been delegated the authority to implement the rule, the owner or operator of an affected source shall report to the Administrator the results of any performance test conducted as required by §63.7 or §63.343(b). If the State has been delegated the authority, the owner or operator of an affected source should report performance test results to the appropriate authority.

(2) Reports of performance test results shall be submitted no later than 90 days following the completion of the performance test, and shall be submitted as part of the notification of compliance status required by paragraph (e) of this section.

(g) *Ongoing compliance status reports for major sources.* (1) The owner or operator of an affected source that is located at a major source site shall submit a summary report to the Administrator to document the ongoing compliance status of the affected source. The report shall contain the information identified in paragraph (g)(3) of this section, and shall be submitted semiannually except when:

(i) The Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source; or

(ii) The monitoring data collected by the owner or operator of the affected source in accordance with §63.343(c) show that the emission limit has been exceeded, in which case quarterly reports shall be submitted. Once an owner or operator of an affected source reports an exceedance, ongoing compliance status reports shall be submitted quarterly until a request to reduce reporting frequency under paragraph (g)(2) of this section is approved.

(2) *Request to reduce frequency of ongoing compliance status reports.* (i) An owner or operator who is required to submit ongoing compliance status reports on a quarterly (or more frequent basis) may reduce the frequency of reporting to semiannual if all of the following conditions are met:

(A) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods), the ongoing compliance status reports demonstrate that the affected source is in compliance with the relevant emission limit;

(B) The owner or operator continues to comply with all applicable recordkeeping and monitoring requirements of subpart A of this part and this subpart; and

(C) The Administrator does not object to a reduced reporting frequency for the affected source, as provided in paragraphs (g)(2) (ii) and (iii) of this section.

(ii) The frequency of submitting ongoing compliance status reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change, and the Administrator does not object to the intended change. In deciding whether to approve a reduced reporting frequency, the Administrator may review information concerning the source's entire previous performance

history during the 5-year recordkeeping period prior to the intended change, or the recordkeeping period since the source's compliance date, whichever is shorter. Records subject to review may include performance test results, monitoring data, and evaluations of an owner or operator's conformance with emission limitations and work practice standards. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce reporting frequency, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(iii) As soon as the monitoring data required by §63.343(c) show that the source is not in compliance with the relevant emission limit, the frequency of reporting shall revert to quarterly, and the owner shall state this exceedance in the ongoing compliance status report for the next reporting period. After demonstrating ongoing compliance with the relevant emission limit for another full year, the owner or operator may again request approval from the Administrator to reduce the reporting frequency as allowed by paragraph (g)(2) of this section.

(3) *Contents of ongoing compliance status reports.* The owner or operator of an affected source for which compliance monitoring is required in accordance with §63.343(c) shall prepare a summary report to document the ongoing compliance status of the source. The report must contain the following information:

(i) The company name and address of the affected source;

(ii) An identification of the operating parameter that is monitored for compliance determination, as required by §63.343(c);

(iii) The relevant emission limitation for the affected source, and the operating parameter value, or range of values, that correspond to compliance with this emission limitation as specified in the notification of compliance status required by paragraph (e) of this section;

(iv) The beginning and ending dates of the reporting period;

(v) A description of the type of process performed in the affected source;

(vi) The total operating time of the affected source during the reporting period;

(vii) If the affected source is a hard chromium electroplating tank and the owner or operator is limiting the maximum cumulative rectifier capacity in accordance with §63.342(c)(2), the actual cumulative rectifier capacity expended during the reporting period, on a month-by-month basis;

(viii) A summary of operating parameter values, including the total duration of excess emissions during the reporting period as indicated by those values, the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to process upsets, control equipment malfunctions, other known causes, and unknown causes;

(ix) A certification by a responsible official, as defined in §63.2, that the work practice standards in §63.342(f) were followed in accordance with the operation and maintenance plan for the source;

(x) If the operation and maintenance plan required by §63.342(f)(3) was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emission and/or

parameter monitoring exceedances are believed to have occurred, and a copy of the report(s) required by §63.342(f)(3)(iv) documenting that the operation and maintenance plan was not followed;

(xi) A description of any changes in monitoring, processes, or controls since the last reporting period;

(xii) The name, title, and signature of the responsible official who is certifying the accuracy of the report; and

(xiii) The date of the report.

(4) When more than one monitoring device is used to comply with the continuous compliance monitoring required by §63.343(c), the owner or operator shall report the results as required for each monitoring device. However, when one monitoring device is used as a backup for the primary monitoring device, the owner or operator shall only report the results from the monitoring device used to meet the monitoring requirements of this subpart. If both devices are used to meet these requirements, then the owner or operator shall report the results from each monitoring device for the relevant compliance period.

(h) *Ongoing compliance status reports for area sources.* The requirements of this paragraph do not alleviate affected area sources from complying with the requirements of State or Federal operating permit programs under 40 CFR part 71.

(1) The owner or operator of an affected source that is located at an area source site shall prepare a summary report to document the ongoing compliance status of the affected source. The report shall contain the information identified in paragraph (g)(3) of this section, shall be completed annually and retained on site, and made available to the Administrator upon request. The report shall be completed annually except as provided in paragraph (h)(2) of this section.

(2) *Reports of exceedances.* (i) If both of the following conditions are met, semiannual reports shall be prepared and submitted to the Administrator:

(A) The total duration of excess emissions (as indicated by the monitoring data collected by the owner or operator of the affected source in accordance with §63.343(c)) is 1 percent or greater of the total operating time for the reporting period; and

(B) The total duration of malfunctions of the add-on air pollution control device and monitoring equipment is 5 percent or greater of the total operating time.

(ii) Once an owner or operator of an affected source reports an exceedance as defined in paragraph (h)(2)(i) of this section, ongoing compliance status reports shall be submitted semiannually until a request to reduce reporting frequency under paragraph (h)(3) of this section is approved.

(iii) The Administrator may determine on a case-by-case basis that the summary report shall be completed more frequently and submitted, or that the annual report shall be submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the source.

(3) *Request to reduce frequency of ongoing compliance status reports.* (i) An owner or operator who is required to submit ongoing compliance status reports on a semiannual (or more frequent) basis, or is required to submit its annual report instead of retaining it on site, may reduce the frequency of reporting to annual and/or be allowed to maintain the annual report onsite if all of the following conditions are met:

(A) For 1 full year (e.g., 2 semiannual or 4 quarterly reporting periods), the ongoing compliance status reports demonstrate that the affected source is in compliance with the relevant emission limit;

(B) The owner or operator continues to comply with all applicable recordkeeping and monitoring requirements of subpart A of this part and this subpart; and

(C) The Administrator does not object to a reduced reporting frequency for the affected source, as provided in paragraphs (h)(3) (ii) and (iii) of this section.

(ii) The frequency of submitting ongoing compliance status reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change, and the Administrator does not object to the intended change. In deciding whether to approve a reduced reporting frequency, the Administrator may review information concerning the source's previous performance history during the 5-year recordkeeping period prior to the intended change, or the recordkeeping period since the source's compliance date, whichever is shorter. Records subject to review may include performance test results, monitoring data, and evaluations of an owner or operator's conformance with emission limitations and work practice standards. Such information may be used by the Administrator to make a judgement about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce reporting frequency, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(iii) As soon as the monitoring data required by §63.343(c) show that the source is not in compliance with the relevant emission limit, the frequency of reporting shall revert to semiannual, and the owner shall state this exceedance in the ongoing compliance status report for the next reporting period. After demonstrating ongoing compliance with the relevant emission limit for another full year, the owner or operator may again request approval from the Administrator to reduce the reporting frequency as allowed by paragraph (h)(3) of this section.

(i) *Reports associated with trivalent chromium baths.* The requirements of this paragraph do not alleviate affected sources from complying with the requirements of State or Federal operating permit programs under title V. Owners or operators complying with the provisions of §63.342(e) are not subject to paragraphs (a) through (h) of this section, but must instead submit the following reports:

(1) Within 180 days after January 25, 1995, submit an initial notification that includes:

(i) The same information as is required by paragraphs (c)(1) (i) through (v) of this section; and

(ii) A statement that a trivalent chromium process that incorporates a wetting agent will be used to comply with §63.342(e); and

(iii) The list of bath components that comprise the trivalent chromium bath, with the wetting agent clearly identified; and

(2) Within 30 days of the compliance date specified in §63.343(a), a notification of compliance status that contains an update of the information submitted in accordance with paragraph (i)(1) of this section or a statement that the information is still accurate; and

(3) Within 30 days of a change to the trivalent chromium electroplating process, a report that includes:

(i) A description of the manner in which the process has been changed and the emission limitation, if any, now applicable to the affected source;

(ii) If a different emission limitation applies, the applicable information required by paragraph (c)(1) of this section; and

(iii) The notification and reporting requirements of paragraphs (d), (e), (f), (g), and (h) of this section, which shall be submitted in accordance with the schedules identified in those paragraphs.

[60 FR 4963, Jan. 25, 1995, as amended at 61 FR 27787, June 3, 1996; 62 FR 4465, Jan. 30, 1997, 62 FR 42921, Aug. 11, 1997; 69 FR 42897, July 19, 2004]

**§ 63.348 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 (4) of this section.

(1) Approval of alternatives to the requirements in §§63.340, 63.342(a) through (e) and (g), and 63.343(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 major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.

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

[68 FR 37347, June 23, 2003]

**Table 1 to Subpart N of Part 63—General Provisions Applicability to Subpart N**

General provisions reference	Applies to subpart N	Comment
63.1(a)(1)	Yes	Additional terms defined in §63.341; when overlap between subparts A and N occurs, subpart N takes precedence.
63.1(a)(2)	Yes	
63.1(a)(3)	Yes	
63.1(a)(4)	Yes	Subpart N clarifies the applicability of each paragraph in subpart A to sources subject to subpart N.

General provisions reference	Applies to subpart N	Comment
63.1(a)(6)	Yes	
63.1(a)(7)	Yes	
63.1(a)(8)	Yes	
63.1(a)(10)	Yes	
63.1(a)(11)	Yes	§63.347(a) of subpart N also allows report submissions via fax and on electronic media.
63.1(a)(12)–(14)	Yes	
63.1(b)(1)	No	§63.340 of subpart N specifies applicability.
63.1(b)(2)	Yes	
63.1(b)(3)	No	This provision in subpart A is being deleted. Also, all affected area and major sources are subject to subpart N; there are no exemptions.
63.1(c)(1)	Yes	Subpart N clarifies the applicability of each paragraph in subpart A to sources subject to subpart N.
63.1(c)(2)	Yes	§63.340(e) of Subpart N exempts area sources from the obligation to obtain Title V operating permits.
63.1(c)(4)	Yes	
63.1(c)(5)	No	Subpart N clarifies that an area source that becomes a major source is subject to the requirements for major sources.
63.1(e)	Yes	
63.2	Yes	Additional terms defined in §63.341; when overlap between subparts A and N occurs, subpart N takes precedence.
63.3	Yes	Other units used in subpart N are defined in that subpart.
63.4	Yes	
63.5(a)	Yes	Except replace the term “source” and “stationary source” in §63.5(a) (1) and (2) of subpart A with “affected sources.”
63.5(b)(1)	Yes	
63.5(b)(3)	Yes	Applies only to major affected sources.
63.5(b)(4)	No	Subpart N (§63.345) specifies requirements for the notification of construction or reconstruction for affected sources that are not major.
63.5(b)(5)	Yes	
63.5(b)(6)	Yes	
63.5(d)(1)(i)	No	§63.345(c)(5) of subpart N specifies when the application or notification shall be submitted.
63.5(d)(1)(ii)	Yes	Applies to major affected sources that are new or reconstructed.

<b>General provisions reference</b>	<b>Applies to subpart N</b>	<b>Comment</b>
63.5(d)(1)(iii)	Yes	Except information should be submitted with the Notification of Compliance Status required by §63.347(e) of subpart N.
63.5(d)(2)	Yes	Applies to major affected sources that are new or reconstructed except: (1) replace “source” in §63.5(d)(2) of subpart A with “affected source”; and (2) actual control efficiencies are submitted with the Notification of Compliance Status required by §63.347(e).
63.5(d)(3)–(4)	Yes	Applies to major affected sources that are new or reconstructed.
63.5(e)	Yes	Applies to major affected sources that are new or reconstructed.
63.5(f)(1)	Yes	Except replace “source” in §63.5(f)(1) of subpart A with “affected source.”
63.5(f)(2)	No	New or reconstructed affected sources shall submit the request for approval of construction or reconstruction under §63.5(f) of subpart A by the deadline specified in §63.345(c)(5) of subpart N.
63.6(a)	Yes	
63.6(b)(1)–(2)	Yes	Except replace “source” in §63.6(b)(1)–(2) of part A with “affected source.”
63.6(b)(3)–(4)	Yes	
63.6(b)(5)	Yes	Except replace “source” in §63.6(b)(5) of subpart A with “affected source.”
63.6(b)(7)	No	Provisions for new area sources that become major sources are contained in §63.343(a)(4) of subpart N.
63.6(c)(1)–(2)	Yes	Except replace “source” in §63.6(c)(1)–(2) of subpart A with “affected source.”
63.6(c)(5)	No	Compliance provisions for existing area sources that become major sources are contained in §63.343(a)(3) of subpart N.
63.6(e)	No	§63.342(f) of subpart N contains work practice standards (operation and maintenance requirements) that override these provisions.
63.6(f)(1)	No	§63.342(b) of subpart N specifies when the standards apply.
63.6(f)(2)(i)–(ii)	Yes	
63.6(f)(2)(iii)	No	§63.344(b) of subpart N specifies instances in which previous performance test results for existing sources are acceptable.
63.6(f)(2)(iv)	Yes	
63.6(f)(2)(v)	Yes	
63.6(f)(3)	Yes	
63.6(g)	Yes	
63.6(h)	No	Subpart N does not contain any opacity or visible emission standards.
63.6(i)(1)	Yes	
63.6(i)(2)	Yes	Except replace “source” in §63.6(i)(2)(i) and (ii) of subpart A with “affected source.”

General provisions reference	Applies to subpart N	Comment
63.6(i)(3)	Yes	
63.6(i)(4)(i)	No	§63.343(a)(6) of subpart N specifies the procedures for obtaining an extension of compliance and the date by which such requests must be submitted.
63.6(i)(4)(ii)	Yes	
63.6(i)(5)	Yes	
63.6(i)(6)(i)	Yes	This paragraph only references “paragraph (i)(4) of this section” for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension.
63.6(i)(6)(ii)	Yes	
63.6(i)(7)	Yes	
63.6(i)(8)	Yes	This paragraph only references “paragraphs (i)(4) through (i)(6) of this section” for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension.
63.6(i)(9)	Yes	This paragraph only references “paragraphs (i)(4) through (i)(6) of this section” and “paragraphs (i)(4) and (i)(5) of this section” for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension.
63.6(i)(10)(i)–(iv)	Yes	
63.6(i)(10)(v)(A)	Yes	This paragraph only references “paragraph (i)(4)” for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension.
63.6(i)(10)(v)(B)	Yes	
63.6(i)(11)	Yes	
63.6(i)(12)(i)	Yes	This paragraph only references “paragraph (i)(4)(i) or (i)(5) of this section” for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension.
63.6(i)(12)(ii)–(iii)	Yes	
63.6(i)(13)	Yes	
63.6(i)(14)	Yes	
63.6(i)(16)	Yes	
63.6(j)	Yes	
63.7(a)(1)	Yes	
63.7(a)(2)(i)–(vi)	Yes	
63.7(a)(2)(ix)	Yes	
63.7(a)(3)	Yes	

General provisions reference	Applies to subpart N	Comment
63.7(b)(1)	No	§63.347(d) of subpart N requires notification prior to the performance test. §63.344(a) of subpart N requires submission of a site-specific test plan upon request.
63.7(b)(2)	Yes	
63.7(c)	No	§63.344(a) of subpart N specifies what the test plan should contain, but does not require test plan approval or performance audit samples.
63.7(d)	Yes	Except replace “source” in the first sentence of §63.7(d) of subpart A with “affected source.”
63.7(e)	Yes	Subpart N also contains test methods specific to affected sources covered by that subpart.
63.7(f)	Yes	§63.344(c)(2) of subpart N identifies CARB Method 425 as acceptable under certain conditions.
63.7(g)(1)	No	Subpart N identifies the items to be reported in the compliance test [§63.344(a)] and the timeframe for submitting the results [§63.347(f)].
63.7(g)(3)	Yes	
63.7(h)(1)–(2)	Yes	
63.7(h)(3)(i)	Yes	This paragraph only references “§63.6(i)” for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension.
63.7(h)(3)(ii)–(iii)	Yes	
63.7(h)(4)–(5)	Yes	
63.8(a)(1)	Yes	
63.8(a)(2)	No	Work practice standards are contained in §63.342(f) of subpart N.
63.8(a)(4)	No	
63.8(b)(1)	Yes	
63.8(b)(2)	No	§63.344(d) of subpart N specifies the monitoring location when there are multiple sources.
63.8(b)(3)	No	§63.347(g)(4) of subpart N identifies reporting requirements when multiple monitors are used.
63.8(c)(1)(i)	No	Subpart N requires proper maintenance of monitoring devices expected to be used by sources subject to subpart N.
63.8(c)(1)(ii)	No	§63.342(f)(3)(iv) of subpart N specifies reporting when the O&M plan is not followed.
63.8(c)(1)(iii)	No	§63.343(f)(2) identifies the criteria for whether O&M procedures are acceptable.
63.8(c)(2)–(3)	No	§63.344(d)(2) requires appropriate use of monitoring devices.
63.8(c)(4)–(7)	No	

General provisions reference	Applies to subpart N	Comment
63.8(d)	No	Maintenance of monitoring devices is required by §§63.342(f) and 63.344(d)(2) of subpart N.
63.8(e)	No	There are no performance evaluation procedures for the monitoring devices expected to be used to comply with subpart N.
63.8(f)(1)	Yes	
63.8(f)(2)	No	Instances in which the Administrator may approve alternatives to the monitoring methods and procedures of subpart N are contained in §63.343(c)(8) of subpart N.
63.8(f)(3)	Yes	
63.8(f)(4)	Yes	
63.8(f)(5)	Yes	
63.8(f)(6)	No	Subpart N does not require the use of CEM's.
63.8(g)	No	Monitoring data does not need to be reduced for reporting purposes because subpart N requires measurement once/day.
63.9(a)	Yes	
63.9(b)(1)(i)–(ii)	No	§63.343(a)(3) of subpart N requires area sources to comply with major source provisions if an increase in HAP emissions causes them to become major sources.
63.9(b)(1)(iii)	No	§63.347(c)(2) of subpart N specifies initial notification requirements for new or reconstructed affected sources.
63.9(b)(2)	No	§63.347(c)(1) of subpart N specifies the information to be contained in the initial notification.
63.9(b)(3)	No	§63.347(c)(2) of subpart N specifies notification requirements for new or reconstructed sources that are not major affected sources.
63.9(b)(4)	No	
63.9(b)(5)	No	
63.9(c)	Yes	This paragraph only references “§63.6(i)(4) through §63.6(i)(6)” for compliance extension provisions. But, §63.343(a)(6) of subpart N also contains provisions for requesting a compliance extension. Subpart N provides a different timeframe for submitting the request than §63.6(i)(4).
63.9(d)	Yes	This paragraph only references “the notification dates established in paragraph (g) of this section.” But, §63.347 of subpart N also contains notification dates.
63.9(e)	No	Notification of performance test is required by §63.347(d) of subpart N.
63.9(f)	No	
63.9(g)	No	Subpart N does not require a performance evaluation or relative accuracy test for monitoring devices.

General provisions reference	Applies to subpart N	Comment
63.9(h)(1)–(3)	No	§63.347(e) of subpart N specifies information to be contained in the notification of compliance status and the timeframe for submitting this information.
63.9(h)(5)	No	Similar language has been incorporated into §63.347(e)(2)(iii) of subpart N.
63.9(h)(6)	Yes	
63.9(i)	Yes	
63.9(j)	Yes	
63.10(a)	Yes	
63.10(b)(1)	Yes	
63.10(b)(2)	No	§63.346(b) of subpart N specifies the records that must be maintained.
63.10(b)(3)	No	Subpart N applies to major and area sources.
63.10(c)	No	Applicable requirements of §63.10(c) have been incorporated into §63.346(b) of subpart N.
63.10(d)(1)	Yes	
63.10(d)(2)	No	§63.347(f) of subpart N specifies the timeframe for reporting performance test results.
63.10(d)(3)	No	Subpart N does not contain opacity or visible emissions standards.
63.10(d)(4)	Yes	
63.10(d)(5)	No	§63.342(f)(3)(iv) and §63.347(g)(3) of subpart N specify reporting associated with malfunctions.
63.10(e)	No	§63.347(g) and (h) of subpart N specify the frequency of periodic reports of monitoring data used to establish compliance. Applicable requirements of §63.10(e) have been incorporated into §63.347(g) and (h).
63.10(f)	Yes	
63.11	No	Flares will not be used to comply with the emission limits.
63.12–63.15	Yes	

[60 FR 4963, Jan. 25, 1995, as amended at 61 FR 27787, June 3, 1996; 70 FR 75345, Dec. 19, 2005]

## Attachment B to Part 70 Operating Permit No. T147-11043-00041

### 40 CFR 60, Subpart Kb—Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984

**Source:** 52 FR 11429, Apr. 8, 1987, unless otherwise noted.

#### § 60.110b Applicability and designation of affected facility.

(a) Except as provided in paragraph (b) of this section, the affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 cubic meters ( $m^3$ ) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.

(b) This subpart does not apply to storage vessels with a capacity greater than or equal to 151  $m^3$  storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) or with a capacity greater than or equal to 75  $m^3$  but less than 151  $m^3$  storing a liquid with a maximum true vapor pressure less than 15.0 kPa.

(c) [Reserved]

(d) This subpart does not apply to the following:

(1) Vessels at coke oven by-product plants.

(2) Pressure vessels designed to operate in excess of 204.9 kPa and without emissions to the atmosphere.

(3) Vessels permanently attached to mobile vehicles such as trucks, railcars, barges, or ships.

(4) Vessels with a design capacity less than or equal to 1,589.874  $m^3$  used for petroleum or condensate stored, processed, or treated prior to custody transfer.

(5) Vessels located at bulk gasoline plants.

(6) Storage vessels located at gasoline service stations.

(7) Vessels used to store beverage alcohol.

(8) Vessels subject to subpart GGGG of 40 CFR part 63.

(e) *Alternative means of compliance*—(1) *Option to comply with part 65.* Owners or operators may choose to comply with 40 CFR part 65, subpart C, to satisfy the requirements of §§60.112b through 60.117b for storage vessels that are subject to this subpart that meet the specifications in paragraphs (e)(1)(i) and (ii) of this section. When choosing to comply with 40 CFR part 65, subpart C, the monitoring requirements of §60.116b(c), (e), (f)(1), and (g) still apply. Other provisions applying to owners or operators who choose to comply with 40 CFR part 65 are provided in 40 CFR 65.1.

(i) A storage vessel with a design capacity greater than or equal to 151 m<sup>3</sup> containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa; or

(ii) A storage vessel with a design capacity greater than 75 m<sup>3</sup> but less than 151 m<sup>3</sup> containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa.

(2) *Part 60, subpart A.* Owners or operators who choose to comply with 40 CFR part 65, subpart C, must also comply with §§60.1, 60.2, 60.5, 60.6, 60.7(a)(1) and (4), 60.14, 60.15, and 60.16 for those storage vessels. All sections and paragraphs of subpart A of this part that are not mentioned in this paragraph (e)(2) do not apply to owners or operators of storage vessels complying with 40 CFR part 65, subpart C, except that provisions required to be met prior to implementing 40 CFR part 65 still apply. Owners and operators who choose to comply with 40 CFR part 65, subpart C, must comply with 40 CFR part 65, subpart A.

(3) *Internal floating roof report.* If an owner or operator installs an internal floating roof and, at initial startup, chooses to comply with 40 CFR part 65, subpart C, a report shall be furnished to the Administrator stating that the control equipment meets the specifications of 40 CFR 65.43. This report shall be an attachment to the notification required by 40 CFR 65.5(b).

(4) *External floating roof report.* If an owner or operator installs an external floating roof and, at initial startup, chooses to comply with 40 CFR part 65, subpart C, a report shall be furnished to the Administrator stating that the control equipment meets the specifications of 40 CFR 65.44. This report shall be an attachment to the notification required by 40 CFR 65.5(b).

[52 FR 11429, Apr. 8, 1987, as amended at 54 FR 32973, Aug. 11, 1989; 65 FR 78275, Dec. 14, 2000; 68 FR 59332, Oct. 15, 2003]

#### **§ 60.111b Definitions.**

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

*Bulk gasoline plant* means any gasoline distribution facility that has a gasoline throughput less than or equal to 75,700 liters per day. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under Federal requirement or Federal, State or local law, and discoverable by the Administrator and any other person.

*Condensate* means hydrocarbon liquid separated from natural gas that condenses due to changes in the temperature or pressure, or both, and remains liquid at standard conditions.

*Custody transfer* means the transfer of produced petroleum and/or condensate, after processing and/or treatment in the producing operations, from storage vessels or automatic transfer facilities to pipelines or any other forms of transportation.

*Fill* means the introduction of VOL into a storage vessel but not necessarily to complete capacity.

*Gasoline service station* means any site where gasoline is dispensed to motor vehicle fuel tanks from stationary storage tanks.

*Maximum true vapor pressure* means the equilibrium partial pressure exerted by the volatile organic compounds (as defined in 40 CFR 51.100) in the stored VOL at the temperature equal to the highest calendar-month average of the VOL storage temperature for VOL's stored above or below the ambient temperature or at the local maximum monthly average temperature as reported by the National Weather Service for VOL's stored at the ambient temperature, as determined:

(1) In accordance with methods described in American Petroleum Institute Bulletin 2517, Evaporation Loss From External Floating Roof Tanks, (incorporated by reference—see §60.17); or

(2) As obtained from standard reference texts; or

(3) As determined by ASTM D2879–83, 96, or 97 (incorporated by reference—see §60.17);

(4) Any other method approved by the Administrator.

*Petroleum* means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal.

*Petroleum liquids* means petroleum, condensate, and any finished or intermediate products manufactured in a petroleum refinery.

*Process tank* means a tank that is used within a process (including a solvent or raw material recovery process) to collect material discharged from a feedstock storage vessel or equipment within the process before the material is transferred to other equipment within the process, to a product or by-product storage vessel, or to a vessel used to store recovered solvent or raw material. In many process tanks, unit operations such as reactions and blending are conducted. Other process tanks, such as surge control vessels and bottoms receivers, however, may not involve unit operations.

*Reid vapor pressure* means the absolute vapor pressure of volatile crude oil and volatile nonviscous petroleum liquids except liquified petroleum gases, as determined by ASTM D323–82 or 94 (incorporated by reference—see §60.17).

*Storage vessel* means each tank, reservoir, or container used for the storage of volatile organic liquids but does not include:

(1) Frames, housing, auxiliary supports, or other components that are not directly involved in the containment of liquids or vapors;

(2) Subsurface caverns or porous rock reservoirs; or

(3) Process tanks.

*Volatile organic liquid (VOL)* means any organic liquid which can emit volatile organic compounds (as defined in 40 CFR 51.100) into the atmosphere.

*Waste* means any liquid resulting from industrial, commercial, mining or agricultural operations, or from community activities that is discarded or is being accumulated, stored, or physically, chemically, or biologically treated prior to being discarded or recycled.

[52 FR 11429, Apr. 8, 1987, as amended at 54 FR 32973, Aug. 11, 1989; 65 FR 61756, Oct. 17, 2000; 68 FR 59333, Oct. 15, 2003]

#### **§ 60.112b Standard for volatile organic compounds (VOC).**

(a) The owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m<sup>3</sup> containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa but less than 76.6 kPa or with a design capacity greater than or equal to 75 m<sup>3</sup> but less than 151 m<sup>3</sup>

containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa but less than 76.6 kPa, shall equip each storage vessel with one of the following:

(1) A fixed roof in combination with an internal floating roof meeting the following specifications:

(i) The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

(ii) Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

(A) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

(B) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.

(C) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

(iii) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

(iv) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

(v) Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

(vi) Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

(vii) Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

(viii) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

(ix) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

(2) An external floating roof. An external floating roof means a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Each external floating roof must meet the following specifications:

(i) Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

(A) The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in §60.113b(b)(4), the seal shall completely cover the annular space between the edge of the floating roof and tank wall.

(B) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in §60.113b(b)(4).

(ii) Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

(iii) The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

(3) A closed vent system and control device meeting the following specifications:

(i) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in part 60, subpart VV, §60.485(b).

(ii) The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements (§60.18) of the General Provisions.

(4) A system equivalent to those described in paragraphs (a)(1), (a)(2), or (a)(3) of this section as provided in §60.114b of this subpart.

(b) The owner or operator of each storage vessel with a design capacity greater than or equal to 75 m<sup>3</sup> which contains a VOL that, as stored, has a maximum true vapor pressure greater than or equal to 76.6 kPa shall equip each storage vessel with one of the following:

(1) A closed vent system and control device as specified in §60.112b(a)(3).

(2) A system equivalent to that described in paragraph (b)(1) as provided in §60.114b of this subpart.

(c) *Site-specific standard for Merck & Co., Inc.'s Stonewall Plant in Elkton, Virginia.* This paragraph applies only to the pharmaceutical manufacturing facility, commonly referred to as the Stonewall Plant, located at Route 340 South, in Elkton, Virginia ("site").

(1) For any storage vessel that otherwise would be subject to the control technology requirements of paragraphs (a) or (b) of this section, the site shall have the option of either complying directly with the requirements of this subpart, or reducing the site-wide total criteria pollutant emissions cap (total emissions cap) in accordance with the procedures set forth in a permit issued pursuant to 40 CFR 52.2454. If the site chooses the option of reducing the total emissions cap in accordance with the procedures set forth in such permit, the requirements of such permit shall apply in lieu of the otherwise applicable requirements of this subpart for such storage vessel.

(2) For any storage vessel at the site not subject to the requirements of 40 CFR 60.112b (a) or (b), the requirements of 40 CFR 60.116b (b) and (c) and the General Provisions (subpart A of this part) shall not apply.

[52 FR 11429, Apr. 8, 1987, as amended at 62 FR 52641, Oct. 8, 1997]

### **§ 60.113b Testing and procedures.**

The owner or operator of each storage vessel as specified in §60.112b(a) shall meet the requirements of paragraph (a), (b), or (c) of this section. The applicable paragraph for a particular storage vessel depends on the control equipment installed to meet the requirements of §60.112b.

(a) After installing the control equipment required to meet §60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or operator shall:

(1) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.

(2) For Vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in §60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

(3) For vessels equipped with a double-seal system as specified in §60.112b(a)(1)(ii)(B):

(i) Visually inspect the vessel as specified in paragraph (a)(4) of this section at least every 5 years; or

(ii) Visually inspect the vessel as specified in paragraph (a)(2) of this section.

(4) Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in

the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in paragraphs (a)(2) and (a)(3)(ii) of this section and at intervals no greater than 5 years in the case of vessels specified in paragraph (a)(3)(i) of this section.

(5) Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by paragraphs (a)(1) and (a)(4) of this section to afford the Administrator the opportunity to have an observer present. If the inspection required by paragraph (a)(4) of this section is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.

(b) After installing the control equipment required to meet §60.112b(a)(2) (external floating roof), the owner or operator shall:

(1) Determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel and between the secondary seal and the wall of the storage vessel according to the following frequency.

(i) Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter.

(ii) Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days of the initial fill with VOL and at least once per year thereafter.

(iii) If any source ceases to store VOL for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of paragraphs (b)(1)(i) and (b)(1)(ii) of this section.

(2) Determine gap widths and areas in the primary and secondary seals individually by the following procedures:

(i) Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.

(ii) Measure seal gaps around the entire circumference of the tank in each place where a 0.32-cm diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location.

(iii) The total surface area of each gap described in paragraph (b)(2)(ii) of this section shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

(3) Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in paragraph (b)(4) of this section.

(4) Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in (b)(4) (i) and (ii) of this section:

(i) The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 Cm<sup>2</sup> per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm.

(A) One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface.

(B) There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

(ii) The secondary seal is to meet the following requirements:

(A) The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in paragraph (b)(2)(iii) of this section.

(B) The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm<sup>2</sup> per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm.

(C) There are to be no holes, tears, or other openings in the seal or seal fabric.

(iii) If a failure that is detected during inspections required in paragraph (b)(1) of §60.113b(b) cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in §60.115b(b)(4). Such extension request must include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

(5) Notify the Administrator 30 days in advance of any gap measurements required by paragraph (b)(1) of this section to afford the Administrator the opportunity to have an observer present.

(6) Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed.

(i) If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL.

(ii) For all the inspections required by paragraph (b)(6) of this section, the owner or operator shall notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the Administrator the opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph (b)(6) of this section is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.

(c) The owner or operator of each source that is equipped with a closed vent system and control device as required in §60.112b (a)(3) or (b)(2) (other than a flare) is exempt from §60.8 of the General Provisions and shall meet the following requirements.

(1) Submit for approval by the Administrator as an attachment to the notification required by §60.7(a)(1) or, if the facility is exempt from §60.7(a)(1), as an attachment to the notification required by §60.7(a)(2), an operating plan containing the information listed below.

(i) Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph.

(ii) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).

(2) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with paragraph (c)(1) of this section, unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies.

(d) The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in §60.112b (a)(3) or (b)(2) shall meet the requirements as specified in the general control device requirements, §60.18 (e) and (f).

[52 FR 11429, Apr. 8, 1987, as amended at 54 FR 32973, Aug. 11, 1989]

#### **§ 60.114b Alternative means of emission limitation.**

(a) If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in emissions at least equivalent to the reduction in emissions achieved by any requirement in §60.112b, the Administrator will publish in the Federal Register a notice permitting the use of the alternative means for purposes of compliance with that requirement.

(b) Any notice under paragraph (a) of this section will be published only after notice and an opportunity for a hearing.

(c) Any person seeking permission under this section shall submit to the Administrator a written application including:

(1) An actual emissions test that uses a full-sized or scale-model storage vessel that accurately collects and measures all VOC emissions from a given control device and that accurately simulates wind and accounts for other emission variables such as temperature and barometric pressure.

(2) An engineering evaluation that the Administrator determines is an accurate method of determining equivalence.

(d) The Administrator may condition the permission on requirements that may be necessary to ensure operation and maintenance to achieve the same emissions reduction as specified in §60.112b.

#### **§ 60.115b Reporting and recordkeeping requirements.**

The owner or operator of each storage vessel as specified in §60.112b(a) shall keep records and furnish reports as required by paragraphs (a), (b), or (c) of this section depending upon the control equipment installed to meet the requirements of §60.112b. The owner or operator shall keep copies of all reports and records required by this section, except for the record required by (c)(1), for at least 2 years. The record required by (c)(1) will be kept for the life of the control equipment.

(a) After installing control equipment in accordance with §60.112b(a)(1) (fixed roof and internal floating roof), the owner or operator shall meet the following requirements.

(1) Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of §60.112b(a)(1) and §60.113b(a)(1). This report shall be an attachment to the notification required by §60.7(a)(3).

(2) Keep a record of each inspection performed as required by §60.113b (a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

(3) If any of the conditions described in §60.113b(a)(2) are detected during the annual visual inspection required by §60.113b(a)(2), a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

(4) After each inspection required by §60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in §60.113b(a)(3)(ii), a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of §60.112b(a)(1) or §60.113b(a)(3) and list each repair made.

(b) After installing control equipment in accordance with §60.112b(a)(2) (external floating roof), the owner or operator shall meet the following requirements.

(1) Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of §60.112b(a)(2) and §60.113b(b)(2), (b)(3), and (b)(4). This report shall be an attachment to the notification required by §60.7(a)(3).

(2) Within 60 days of performing the seal gap measurements required by §60.113b(b)(1), furnish the Administrator with a report that contains:

(i) The date of measurement.

(ii) The raw data obtained in the measurement.

(iii) The calculations described in §60.113b (b)(2) and (b)(3).

(3) Keep a record of each gap measurement performed as required by §60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain:

(i) The date of measurement.

(ii) The raw data obtained in the measurement.

(iii) The calculations described in §60.113b (b)(2) and (b)(3).

(4) After each seal gap measurement that detects gaps exceeding the limitations specified by §60.113b(b)(4), submit a report to the Administrator within 30 days of the inspection. The report will identify the vessel and contain the information specified in paragraph (b)(2) of this section and the date the vessel was emptied or the repairs made and date of repair.

(c) After installing control equipment in accordance with §60.112b (a)(3) or (b)(1) (closed vent system and control device other than a flare), the owner or operator shall keep the following records.

(1) A copy of the operating plan.

(2) A record of the measured values of the parameters monitored in accordance with §60.113b(c)(2).

(d) After installing a closed vent system and flare to comply with §60.112b, the owner or operator shall meet the following requirements.

(1) A report containing the measurements required by §60.18(f) (1), (2), (3), (4), (5), and (6) shall be furnished to the Administrator as required by §60.8 of the General Provisions. This report shall be submitted within 6 months of the initial start-up date.

(2) Records shall be kept of all periods of operation during which the flare pilot flame is absent.

(3) Semiannual reports of all periods recorded under §60.115b(d)(2) in which the pilot flame was absent shall be furnished to the Administrator.

#### **§ 60.116b Monitoring of operations.**

(a) The owner or operator shall keep copies of all records required by this section, except for the record required by paragraph (b) of this section, for at least 2 years. The record required by paragraph (b) of this section will be kept for the life of the source.

(b) The owner or operator of each storage vessel as specified in §60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.

(c) Except as provided in paragraphs (f) and (g) of this section, the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m<sup>3</sup> storing a liquid with a maximum true vapor pressure greater than or equal to 3.5 kPa or with a design capacity greater than or equal to 75 m<sup>3</sup> but less than 151 m<sup>3</sup> storing a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.

(d) Except as provided in paragraph (g) of this section, the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m<sup>3</sup> storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa or with a design capacity greater than or equal to 75 m<sup>3</sup> but less than 151 m<sup>3</sup> storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

(e) Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below.

(1) For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

(2) For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(i) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference—see §60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(ii) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

(3) For other liquids, the vapor pressure:

(i) May be obtained from standard reference texts, or

(ii) Determined by ASTM D2879–83, 96, or 97 (incorporated by reference—see §60.17); or

(iii) Measured by an appropriate method approved by the Administrator; or

(iv) Calculated by an appropriate method approved by the Administrator.

(f) The owner or operator of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

(1) Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in paragraph (e) of this section.

(2) For vessels in which the vapor pressure of the anticipated liquid composition is above the cutoff for monitoring but below the cutoff for controls as defined in §60.112b(a), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

(i) ASTM D2879–83, 96, or 97 (incorporated by reference—see §60.17); or

(ii) ASTM D323–82 or 94 (incorporated by reference—see §60.17); or

(iii) As measured by an appropriate method as approved by the Administrator.

(g) The owner or operator of each vessel equipped with a closed vent system and control device meeting the specification of §60.112b or with emissions reductions equipment as specified in 40 CFR 65.42(b)(4), (b)(5), (b)(6), or (c) is exempt from the requirements of paragraphs (c) and (d) of this section.

[52 FR 11429, Apr. 8, 1987, as amended at 65 FR 61756, Oct. 17, 2000; 65 FR 78276, Dec. 14, 2000; 68 FR 59333, Oct. 15, 2003]

**§ 60.117b Delegation of authority.**

(a) In delegating implementation and enforcement authority to a State under section 111(c) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) Authorities which will not be delegated to States: §§60.111b(f)(4), 60.114b, 60.116b(e)(3)(iii), 60.116b(e)(3)(iv), and 60.116b(f)(2)(iii).

[52 FR 11429, Apr. 8, 1987, as amended at 52 FR 22780, June 16, 1987]

## **Attachment C to Part 70 Operating Permit No. T147-11043-00041**

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

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

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

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

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

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

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

(e) Heat recovery steam generators that are associated with combined cycle gas turbines and meet the applicability requirements of subpart KKKK of this part are not subject to this subpart. This subpart will continue to apply to all other heat recovery steam generators that are capable of combusting more than or equal to 2.9 MW (10 MMBtu/hr) heat input of fossil fuel but less than or equal to 29 MW (100 MMBtu/hr) heat input of fossil fuel. If the heat recovery steam generator is subject to this subpart, only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The gas turbine emissions are subject to subpart GG or KKKK, as applicable, of this part).

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

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

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

#### **§ 60.41c Definitions.**

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

*Annual capacity factor* means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input capacity. In the case of steam

generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

*Natural gas* means:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

percent SO<sub>2</sub> reduction requirement specified in paragraph (a) of this section and the emission limit is determined pursuant to paragraph (e)(2) of this section.

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

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

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

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

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

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

(3) Affected facilities located in a noncontinental area.

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

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

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

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

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

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

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

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

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

Where:

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

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

$K_b$  = 260 ng/J (0.60 lb/MMBtu);

$K_c$  = 215 ng/J (0.50 lb/MMBtu);

$H_a$  = Heat input from the combustion of coal, except coal combusted in an affected facility subject to paragraph (b)(2) of this section, in Joules (J) [MMBtu];

$H_b$  = Heat input from the combustion of coal in an affected facility subject to paragraph (b)(2) of this section, in J (MMBtu); and

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(4) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, an owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM standard under §60.43c and not using a post-combustion technology (except a wet scrubber) to reduce PM or SO<sub>2</sub> emissions is not subject to the PM limit in this section.

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

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

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

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

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

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

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

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

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

Where:

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

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

E<sub>w</sub>= SO<sub>2</sub>concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 9 of appendix A of this part, ng/J (lb/MMBtu). The value E<sub>w</sub>for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E<sub>w</sub>if the owner or operator elects to assume E<sub>w</sub>= 0.

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

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

(f) Affected facilities subject to the percent reduction requirements under §60.42c(a) or (b) shall determine compliance with the SO<sub>2</sub>emission limits under §60.42c pursuant to paragraphs (d) or (e) of this section, and shall determine compliance with the percent reduction requirements using the following procedures:

(1) If only coal is combusted, the percent of potential SO<sub>2</sub>emission rate is computed using the following formula:

$$\%P_r = 100 \left( 1 - \frac{\%R_z}{100} \right) \left( 1 - \frac{\%R_f}{100} \right)$$

Where:

$\%P_s$  = Potential SO<sub>2</sub> emission rate, in percent;

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

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

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

(i) To compute the  $\%P_s$ , an adjusted  $\%R_g$  ( $\%R_{g0}$ ) is computed from  $E_{ao0}$  from paragraph (e)(1) of this section and an adjusted average SO<sub>2</sub> inlet rate ( $E_{ai0}$ ) using the following formula:

$$\%R_{g0} = 100 \left( 1 - \frac{E_{ao0}}{E_{ai0}} \right)$$

Where:

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

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

$E_{ai0}$  = Adjusted average SO<sub>2</sub> inlet rate, ng/J (lb/MMBtu).

(ii) To compute  $E_{ai0}$ , an adjusted hourly SO<sub>2</sub> inlet rate ( $E_{hi0}$ ) is used. The  $E_{hi0}$  is computed using the following formula:

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

Where:

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

$E_{hi}$  = Hourly SO<sub>2</sub> inlet rate, ng/J (lb/MMBtu);

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(ii) [Reserved]

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

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

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

(11) During the correlation testing runs of the CEMS required by Performance Specification 11 in appendix B of this part, PM and O<sub>2</sub>(or CO<sub>2</sub>) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and performance tests conducted using the following test methods.

(i) For PM, Method 5 or 5B of appendix A–3 of this part or Method 17 of appendix A–6 of this part shall be used; and

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

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

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

(14) After July 1, 2011, within 90 days after the date of completing each performance evaluation required by paragraph (c)(11) of this section, the owner or operator of the affected facility must either submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at <http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main> or mail a copy to: United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; Mail Code: D243–01; RTP, NC 27711.

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

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011]

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

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

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

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

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

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

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

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

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

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

(2) As an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and

before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

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

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

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

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

(a) Except as provided in paragraphs (c), (d), (e), (f), and (g) of this section, the owner or operator of an affected facility combusting coal, oil, or wood that is subject to the opacity standards under §60.43c shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility subject to an opacity standard in §60.43c(c) that is not required to use a COMS due to paragraphs (c), (d), (e), or (f) of this section that elects not to use a COMS shall conduct a performance test using Method 9 of appendix A-4 of this part and the procedures in §60.11 to demonstrate compliance with the applicable limit in §60.43c by April 29, 2011, within 45 days of stopping use of an existing COMS, or 180 days after initial startup of the facility, whichever is later, and shall comply with either paragraphs (a)(1), (a)(2), or (a)(3) of this section. The observation period for Method 9 of appendix A-4 of this part performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation.

(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 45 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 45 calendar days according to the requirements in §60.45c(a)(8).

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

(3) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A–4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A–4 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Administrator. The observations shall be similar, but not necessarily identical, to the requirements in paragraph (a)(2) of this section. For reference purposes in preparing the monitoring plan, see OAQPS “Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems.” This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Policy Group (D243–02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods.

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

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

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

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

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

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

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

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

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

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

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

(4) You must record the CO measurements and calculations performed according to paragraph (e) of this section and any corrective actions taken. The record of corrective action taken must include the date and

time during which the 24-hour average CO emission level was greater than 0.15 lb/MMBtu, and the date, time, and description of the corrective action.

(f) Owners and operators of an affected facility that is subject to an opacity standard in §60.43c(c) and that uses a bag leak detection system to monitor the performance of a fabric filter (baghouse) according to the most recent requirements in section §60.48Da of this part is not required to operate a COMS.

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

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011]

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(1) Calendar dates covered in the reporting period.

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

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

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

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

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

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

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

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

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

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

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

(1) For distillate oil:

(i) The name of the oil supplier;

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

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

(2) For residual oil:

(i) The name of the oil supplier;

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

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

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

(3) For coal:

(i) The name of the coal supplier;

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

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

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

(4) For other fuels:

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

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

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

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

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

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

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

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

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

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

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

**Technical Support Document (TSD) for a Part 70  
PSD/Significant Source Modification and Significant Permit Modification**

**Source Description and Location**

Source Name:	AK Steel Corporation, Rockport Works
Source Location:	6500 North US 231, Rockport, IN 47635
County:	Spencer
SIC Code:	3312
Operation Permit No.:	T147-11043-00041
Operation Permit Issuance Date:	September 1, 2006
PSD/Significant Source Modification No.:	147-28771-00041
Significant Permit Modification No.:	147-28980-00041
Permit Reviewer:	Laura Spriggs

**Source Definition**

This stationary source consists of three (3) companies\*: one (1) primary source and two (2) on-site contractors.

The primary source is:

AK Steel Corporation (147-00041), a steel coil finishing operation, located at 6500 North U.S. 231, Rockport, Indiana, 47635.

The two on-site contractors are:

- (a) Air Liquide Industrial, U.S.L.P. (formerly MG Industries) (147-00049), an industrial gas production operation, located inside the AK Steel plant, at 6500 North US Route 231, Rockport, Indiana 47635; and
- (b) Precision Strip, Inc. (147-00051), a slitting operation, located inside the AK Steel plant, at 6500 North US Route 231, Rockport, Indiana 47635.

One document for the Part 70 operating permit will be issued to AK Steel. The requirements for Air Liquide Industrial, U.S.L.P. and Precision Strip, Inc. are included in this document, Operating Permit No. T147-11043-00041.

\*IDEM, OAQ is currently making a determination of whether or not American Iron Oxide Company (AMROX) (147-00050) is also part of the AK Steel Corporation source. A final determination will be included in the Part 70 Operating Permit Renewal for AK Steel Corporation.

**Existing Approvals**

The source was issued Part 70 Operating Permit No. T147-11043-00041 on September 1, 2006. The source has since received the following approvals:

- (a) PSD/Significant Source Modification No. 147-23585-00041, issued on April 25, 2007;
- (b) Significant Permit Modification No. 147-23809-00041, issued on May 14, 2007; and

- (c) Administrative Amendment No. 147-25635-00041, issued January 23, 2008.

**County Attainment Status**

The source is located in Spencer County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.
Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Basic nonattainment designation effective federally April 5, 2005, for the Ohio Twp for PM <sub>2.5</sub> . The remainder of Spencer County is unclassifiable or attainment effective April 5, 2005, for PM <sub>2.5</sub> .	

- (a) **Ozone Standards**  
 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. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Spencer County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) **PM<sub>2.5</sub>**  
 Spencer County (Grass Township) has been classified as attainment for PM<sub>2.5</sub>. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM<sub>2.5</sub> emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct PM<sub>2.5</sub> significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct PM<sub>2.5</sub> and SO<sub>2</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.
- (c) **Other Criteria Pollutants**  
 Spencer County has been classified as attainment or unclassifiable in Indiana for SO<sub>2</sub>, CO, PM<sub>10</sub>, NO<sub>2</sub>, and lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

**Fugitive Emissions**

Since this source is classified as a steel mill, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7. Therefore, fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

**Source Status**

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

<b>POTENTIAL TO EMIT (TONS/YEAR)</b>									
Facility	PM	PM10	PM2.5	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	GHGs (as CO <sub>2</sub> e)	HAPs
AK Steel*	252.0	252.0	>100	3.03	63.0	208.0	346.0	> 100,000	less than 10 single, less than 25 combined
Precision Strip	2.76	2.76		-	2.6 lb/VOC per gallon, and less than 3 lbs/hour, or 15 lbs/day**	-	-		-
Air Liquide Industrial, U.S.L.P.	4.42	4.42		0.01	0.73	4.24	17.0		-
<b>Total Emissions</b>	<b>270.26</b>	<b>274.18</b>	<b>&gt;100</b>	<b>3.20</b>	<b>63.73**</b>	<b>220.7</b>	<b>383.3</b>	<b>&gt; 100,000</b>	<b>less than 10 single, less than 25 combined</b>

\* See 147-6713-00041 for specific units

\*\* The use of Precision Strip's back-up electrostatic oiler does not add VOC emissions to the Total VOC, since it operates only when AK Steel's oiler is off line.

- (a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a regulated pollutant is emitted at a rate of 100 tons per year or more, emissions of GHGs are equal to or greater than one hundred thousand (100,000) tons of CO<sub>2</sub> equivalent emissions (CO<sub>2</sub>e) per year and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).
- (b) This existing source is not a major source of HAPs, as defined in 40 CFR 63.2, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).
- (c) These emissions are based upon the Technical Support Document for Administrative Amendment No. 147-25635-00041.

**Description of Proposed Modification**

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by AK Steel Corporation, Rockport Works, on December 21, 2009, related to incorporating three (3) hydrogen batch annealing furnaces, one installed in 1999 and two installed in 2000, into its Part 70 Operating Permit. AK Steel Corporation, Rockport Works failed to obtain construction and operational approval for the three (3) furnaces installed as a part of the Hydrogen Annealing

Facility under PSD Construction Permit No. 147-6713-00041. The construction permit allowed for the installation of fifteen (15) furnaces. Eight (8) furnaces were installed during the first phase of the project and then ten (10) furnaces were installed during the second phase, which resulted in three (3) additional unpermitted furnaces. Since these three furnaces were part of the original construction project, in order to incorporate them into the Part 70 Operating Permit (T147-11043-00041), the furnaces must be evaluated for PSD BACT for each of the regulated air pollutants that triggered BACT analysis in the original PSD construction project as if they were being constructed today. The pollutants that were reviewed for PSD BACT as part of 147-6713-00041 include PM, VOC, CO, and NO<sub>x</sub>. Additionally, PM<sub>10</sub> is being evaluated since it would have been regulated at the time that the additional furnaces were installed. PM<sub>2.5</sub> is not being included as part of the BACT analyses since it was not a regulated air pollutant in 2000.

The following is a description of the emission units and their control devices constructed and operated without a permit and receiving new source review approval:

- (a) One (1) hydrogen batch annealing furnace, installed in February 1999, permitted in 2011, with a maximum heat input capacity of 6.75 MMBtu/hr, using low NO<sub>x</sub> burners as control, and exhausting through the roof vent system in building 500.
- (b) Two (2) hydrogen batch annealing furnaces, installed in February 2000, permitted in 2011, with a maximum heat input capacity of 6.75 MMBtu/hr each, using low NO<sub>x</sub> burners as control, and exhausting through the roof vent system in building 500.

#### **Enforcement Issues**

IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the construction permit rules.

#### **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>Increase in PTE Before Controls of the Modification</b>	
<b>Pollutant</b>	<b>Potential To Emit (ton/yr)</b>
PM	0.17
PM <sub>10</sub>	0.66
SO <sub>2</sub>	0.05
VOC	0.48
CO	7.30
NO <sub>x</sub>	8.70
Single HAPs	0.16 (Hexane)
Total HAPs	0.16

This source modification is subject to 326 IAC 2-7-10.5(f)(1), because the modification is subject to 326 IAC 2-2. 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(d)(1) because a case-by-case determination of an emission limitation is being made.

**Permit Level Determination – PSD**

This modification is subject to 326 IAC 2-2 (PSD) because the modification involves units (three hydrogen batch annealing furnaces) that are required to go through a PSD BACT evaluation for PM, PM10, VOC, CO, and NOx as previously discussed in this Technical Support Document. Appendix B of this Technical Support Document contains the Top-Down BACT analyses for the hydrogen batch annealing furnaces. The *State Rule Applicability Determination* section of this Technical Support Document contains a summary of the BACT determinations.

**Federal Rule Applicability Determination**

The federal rule applicability for this source remains unchanged as a result of this modification.

**State Rule Applicability Determination**

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

**326 IAC 2-2 (Prevention of Significant Deterioration (PSD))**

The original PSD construction permit for AK Steel Corporation, Rockport Works (CP 147-6713-00041, issued on February 13, 1997) granted construction approval for fifteen (15) hydrogen batch annealing furnaces; however, the source constructed eighteen (18) furnaces. Since the three (3) unpermitted furnaces were part of the original PSD construction project, they should have gone through PSD BACT review for PM, VOC, CO, and NOx. These BACT evaluations have been made based on today's standards. Appendix B of this Technical Support Document provides the full documentation of the BACT reviews.

Pursuant to PSD/SSM No. 147-28771-00041 and 326 IAC 2-2-3, the Best Available Control Technology for the three (3) unpermitted hydrogen batch annealing furnaces, identified as Nos. 16-18 shall be as follows:

- (1) NO<sub>x</sub>:
  - (A) NO<sub>x</sub> emissions shall be controlled by low NO<sub>x</sub> burners.
  - (B) NO<sub>x</sub> emissions shall be less than 0.1 lb/MMBtu each.
  - (C) NO<sub>x</sub> emissions shall be less than 9.45 lb/hr total for eighteen (18) batch annealing furnaces, identified as Nos. 1-18.
- (2) CO:
  - (A) CO emissions shall be controlled by good combustion practices.
  - (B) CO emissions shall be less than 0.084 lb/MMBtu and 0.57 lb/hr each.
- (3) PM:
  - (A) PM emissions shall be controlled by good combustion practices.
  - (B) PM emissions shall be less than 0.0019 lb/MMBtu and 0.013 lb/hr each.
- (4) PM<sub>10</sub>:
  - (A) PM<sub>10</sub> emission shall be controlled by good combustion practices.
  - (B) PM<sub>10</sub> emissions shall be less than 0.0076 lb/MMBtu and 0.051 lb/hr each.
- (5) VOC:
  - (A) VOC emissions shall be controlled by good combustion practices.
  - (B) VOC emissions shall be less than 0.0055 lb/MMBtu and 0.037 lb/hr each.

**326 IAC 6-3 (Particulate Matter Emission Limitations for Manufacturing Processes)**

Pursuant to 326 IAC 6-3-1(c)(1), the provisions of 326 IAC 6-3 shall not apply if a particulate matter limitation established in 326 IAC 2-2 is more stringent than the particulate limitation established in 326 IAC 6-3.

**326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)**

The provisions of 326 IAC 7-1.1 are applicable to emissions units with a potential to emit twenty-five (25) tons per year or ten (10) pounds per hour of sulfur dioxide. The potential to emit sulfur dioxide from the hydrogen batch annealing furnaces is less than these thresholds; therefore, the provisions of 326 IAC 7-1.1 are not applicable to the hydrogen batch annealing furnaces.

**326 IAC 8-1-6 (New Facilities – General Reduction Requirements)**

The provisions of 326 IAC 8-1-6 are applicable to new facilities as of January 1, 1980 that have potential emissions of twenty-five (25) tons or more per year of VOC and that are not otherwise regulated by another provision in 326 IAC 8, 326 IAC 20-48, or 326 IAC 20-56. The potential VOC emissions from the hydrogen batch annealing furnaces is less than this threshold; therefore, the provisions of 326 IAC 8-1-6 are not applicable to the hydrogen batch annealing furnaces.

**326 IAC 9 (Carbon Monoxide Emission Rules)**

The provisions of 326 IAC 9 are applicable to stationary sources of carbon monoxide emissions commencing operation after March 21, 1972, and for which an emission limit has been established in 326 IAC 9-1-2 of the rule. There are no emission limits for annealing furnaces in 326 IAC 9-1-2; therefore, the provisions of 326 IAC 9 are not applicable to the hydrogen batch annealing furnaces.

## 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.

See the Proposed Changes section of the TSD for any changes to the Compliance Determination and Compliance Monitoring Requirements of the permit.

## Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T147-11043-00041. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

### Changes Affecting Conditions Throughout the Permit

The following is a summary of changes that have been made throughout the permit:

- (a) *Multiple Conditions - Rule References*  
On October 27, 2010, the Indiana Air Pollution Control Board issued revisions to 326 IAC 2. These revisions resulted in changes to the rule citations listed in the permit. These changes are not changes to the underlining provisions. The change is only to citation of these rules in Section A - General Information, Section A - Emission Units and Pollution Control Equipment Summary, Section A - Insignificant Activities, Section B - Preventative Maintenance Plan, Section B - Emergency Provisions, Section B - Operational Flexibility, Section C - Risk Management Plan, Section C - General Record Keeping Requirements, Section C - General Reporting Requirements, the Facility Descriptions, and Section D - Preventative Maintenance Plan.
- (b) *Multiple Conditions - Mailing Address*  
IDEM, OAQ has decided to remove all references to the source mailing address. IDEM, OAQ will continue to maintain records of the mailing address.
- (c) *Multiple Conditions - Timeframe References*  
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".
- (d) *Multiple Conditions - Responsible Official References*  
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) *Multiple Conditions - Certification Requirement References*  
IDEM, OAQ has decided to clarify what rule requirements a certification needs to meet.
- (f) *Multiple Conditions - Branch Name Updates*  
Several of IDEM's Branches and sections have been renamed. Therefore, IDEM has updated the addresses listed in the permit. References to Permit Administration and Development Section and the Permits Branch have been changed to Permit Administration and Support Section. References to Asbestos Section, Compliance Data Section, Air Compliance Section, and Compliance Branch have been changed to Compliance and Enforcement Branch.
- (g) *Multiple Conditions - Typographical Errors, Language Clarification*  
Throughout the permit, typographical and grammatical errors have been corrected. Additionally, changes to language for clarification or to align with the current preferred permit language conventions have been made.

### **Changes Specific to Section A of the Permit**

- (a) A.1 of the permit has been revised to indicate that the source is a minor source under Section 112 of the Clean Air Act.
- (b) The language in A.2 of the permit has been revised for clarity, relating to the source definition.
- (c) The descriptive information for the hydrogen batch annealing operations has been revised in A.3(g) of the permit.
- (d) The descriptive information for the tanks in A.3(g)(4)(D) and (E) has been revised based on the actual tank capacities.
- (e) A description has been added to A.4 for two (2) 400,000 Btu/hr Torpedo heaters installed in 2004. These are insignificant activities without applicable requirements.

Section A of the permit has been revised as follows:

#### **A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(154)] [326 IAC 2-7-1(22)]**

The Permittee owns and operates a stationary steel coil finishing plant with ancillary equipment.

Source Address: 6500 North U.S. 231, Rockport, Indiana, 47635  
Mailing Address: ~~\_\_\_\_\_~~ Same  
General Source Phone Number: (812) #362-614425  
SIC Code: 3312  
County Location: Spencer  
Source Location Status: Attainment for all criteria pollutants  
Source Status: Part 70 **Operating** Permit Program  
Major Source, under PSD Rules;  
**Minor Source, Section 112 of the Clean Air Act**  
1 of 28 Source Categories

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

This stationary source consists of three **(3)** companies; one **(1)** primary source, and two **(2)** on-site contractors.

The primary source is:

AK Steel Corporation (147-00041), a steel coil finishing operation, is located at 6500 North U.S. 231, Rockport, Indiana, 47635.

The two on-site contractors are:

- (a) Air Liquide Industrial, U.S.L.P. (**formerly MG Industries**) (147-00049), an industrial gas production operation located inside the AK Steel plant, at 6500 North US Route 231, Rockport, Indiana 47635; and
- (b) Precision Strip, Inc. (147-00051), a slitting operation located inside the AK Steel plant, at 6500 North US Route 231, Rockport, Indiana 47635.

One document for the Part 70 operating permit will be issued to AK Steel. **The requirements for Air Liquide Industrial, U.S.L.P. and Precision Strip, Inc., are included in this permit document, Operating Permit No. 147-11043-00041.**

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(154)]

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

**AK STEEL**

- (a) \* \* \*
- (b) \* \* \*
- (c) \* \* \*
- (d) \* \* \*
- (e) \* \* \*
- (f) \* \* \*
- (g) Ancillary Equipment, as listed is;
  - (1) Hydrogen batch annealing **operations, constructed in 1999 and 2000, with emissions exhausting through the roof vent system in building 500, including:**
    - (A) ~~with fifteen~~ **Fifteen (15) natural gas-fired furnaces with low- NOx burners, identified as hydrogen batch annealing furnaces Nos. 1-15, each with a maximum heat input capacity of 6.75 MMBtu/hr. exhausting through the roof vent system in building 500;**
    - (B) **Three (3) natural gas-fired furnaces with low NOx burners, identified as hydrogen batch annealing furnaces Nos. 16-18, permitted in 2011, each with a maximum heat input capacity of 6.75 MMBtu/hr.**
  - (2) \* \* \*
  - (3) \* \* \*
  - (4) Storage tanks for HCl acid, nitric acid, and HF (Hydrofluoric) acid exhausting through a fume scrubber to Stack S04 consisting of:
    - (A) \* \* \*
    - (B) \* \* \*
    - (C) \* \* \*
    - (D) Three (3) HCL/ra acid tanks, each with a capacity of ~~240,000~~ gallons, or **6120,000** gallons combined; and
    - (E) Two (2) CPL waste acid tanks, each with a capacity of ~~240,000~~ gallons, or **480,000** gallons combined.

\* \* \*

A.4 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(154)]

---

- (a) This stationary source also includes the following insignificant activities, operated by AK Steel, ~~which are not specifically regulated,~~ as defined in 326 IAC 2-7-1(21):

\* \* \*

- (9) Two (2) APL natural gas fired Torpedo Heaters, each with a maximum heat input capacity of 0.4 MMBtu/hr, installed in 2004.**

**Changes Specific to Sections B and C of the Permit**

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 is a summary of the revisions that have been made to the B and C Sections of the permit:

- (a) *Section B - Permit Term*  
The statement relating to permits issued pursuant to Title IV of the Clean Air Act has been removed from paragraph (a) of Section B - Permit Term because the Permittee is not subject to Title IV of the Clean Air Act.
- (b) *Section B - Enforceability*  
The appropriate Indiana Code reference has been added to the rule citations.
- (c) *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".
- (d) *Section B - Certification*  
IDEM, OAQ has decided to clarify Section B - Certification to be consistent with the rule and to clarify that Section B - Certification only states what a certification must be.
- (e) *Section B - Preventive Maintenance Plan*  
IDEM, OAQ has decided to clarify Section B - Preventive Maintenance Plan.
- (f) *Section B - Emergency Provisions*  
IDEM, OAQ is revising Section B - Emergency Provisions to delete paragraph (h). 326 IAC 2-7-5(3)(C)(ii) allows that deviations reported under an independent requirement do not have to be included in the Quarterly Deviation and Compliance Monitoring Report.
- (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) of Section C - General Reporting Requirements, 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 B - Operational Flexibility*  
Paragraph (e) was added to clarify the scenario of backup fuel switches.
- (k) *Section B - Source Modification Requirement*  
IDEM, OAQ has decided to reference 326 IAC 2 in Section B - Source Modification Requirement rather than the specific construction rule.
- (l) *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.
- (m) *Section C - Open Burning*  
The condition was revised to clarify when open burning may or may not be conducted.
- (n) *Section C - Incineration*  
IDEM, OAQ has revised Section C - Incineration to more closely reflect the two underlying rules.
- (o) *Section C - Stack Height*  
The rule citations have been updated.
- (p) *Section C - Asbestos Abatement Projects*  
The applicable requirements related to Asbestos Abatement Projects have been included in Section C - Asbestos Abatement Projects.
- (q) *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.
- (r) *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.
- (s) *Section C - Maintenance of Continuous Emission Monitoring Equipment*  
IDEM, OAQ has decided to move Section C - Maintenance of Continuous Emission Monitoring Equipment to Section D.4 since this section includes the Permittee's requirement for CEMs.
- (t) *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.
- (u) *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.

- (v) *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.
- (w) *Section C - Emission Statement*  
IDEM, OAQ decided to remove paragraph (b) of Section C - Emission Statement since it was duplicative of the requirement in Section C - General Reporting Requirements.
- (x) *Section C - General Record Keeping Requirements and General Reporting Requirements*  
(1) On January 22, 2008, U.S. EPA promulgated a rule to address the remand, by the U.S. Court of Appeals for the District of Columbia on June 25, 2005, of the reasonable possibility provisions of the December 31, 2002 major NSR reform rule. IDEM, OAQ has agreed with U.S. EPA to interpret "reasonable possibility" in 326 IAC 2-2 and 326 IAC 2-3 consistent with the January 22, 2008 U.S. EPA rule. To implement this interpretation, IDEM, OAQ is revising Section C - General Record Keeping Requirements and Section C - General Reporting Requirements.  
(2) 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.  
(3) IDEM, OAQ has clarified the Permittee's responsibility with regards to record keeping.  
(4) IDEM, OAQ has clarified the interaction of the Quarterly Deviation and Compliance Monitoring Report and the Emergency Provisions.
- (y) *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:

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

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\* \* \*

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, T147-11043-00041, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit ~~or of permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).~~

- (b) \* \* \*

B.3 Enforceability [326 IAC 2-7-7] **[IC 13-17-12]**

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\* \* \*

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

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\* \* \*

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

---

\* \* \*

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

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\* \* \*

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~~ **A certification submitted shall contain required by this permit meets the requirements of 326 IAC 2-7-6(1) if:**

**(1) it contains a certification by a "responsible official of truth, accuracy," as defined by 326 IAC 2-7-1(34), and completeness. This**

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

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

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

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

---

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

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

\* \* \*

(b) \* \* \*

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

\* \* \*

The submittal by the Permittee does require ~~the~~ 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.10 Preventive Maintenance Plan [~~326 IAC 1-6-3~~][326 IAC 2-7-5(1),(3) and (132)][326 IAC 2-7-6(1) and (6)][**326 IAC 1-6-3**]

(a) The Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) ~~within~~ **no later than** ninety (90) days after issuance of this permit for the source as described in 326 IAC 1-6-3. At a minimum, the PMPs shall include:

(1) \* \* \*

(2) \* \* \*

(3) \* \* \*

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

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

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

**The Permittee shall implement the PMPs.**

(b) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions ~~or potential to emit~~. The PMPs **and their submittal** do not require ~~the~~ 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) 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, or **Southwest 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 Section~~), or

**Compliance and Enforcement Branch**), or

Telephone Number: 317-233-0178 (ask for ~~Compliance Section~~ **Office of Air Quality**,

**Compliance and Enforcement Branch**)

Facsimile Number: 317-233-6865

~~Telephone Number: 1-888-672-8323 (Southwest Regional Office)~~

~~Facsimile Number:~~ **phone: (812-) 380-2305; fax: (812) 380-2304 (Southwest Regional Office).**

- (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, ~~MC61~~  
**MC 61-53 IGCN 1003**  
Indianapolis, Indiana 46204-2251

and

~~IDEM Southwest Regional Office~~  
~~1120 North Vincennes Avenue~~  
~~P.O. Box 128~~  
~~Petersburg, Indiana 47567-0128~~

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) \* \* \*
- (B) \* \* \*
- (C) \* \* \*

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

(6) \* \* \*

(c) \* \* \*

(d) \* \* \*

(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)(98) 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) \* \* \*

~~(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.~~

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

\* \* \*

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

\* \* \*

~~B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]~~

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

~~Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, MC61-53 IGCN 1003  
Indianapolis, Indiana 46204-2254~~

~~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.145 Permit Modification, Reopening, Revocation and Reissuance, or Termination  
[326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 **Operating** Permit modification,

revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require ~~the~~ certification **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) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ<sub>7</sub> determines any of the following:  
\* \* \*
- (c) Proceedings by IDEM, OAQ<sub>7</sub> 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<sub>7</sub> at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ<sub>7</sub> may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

**B.156 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<sub>7</sub> and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require ~~the~~ certification **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  
~~Permits Branch~~**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) \* \* \*
  - (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<sub>7</sub> 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<sub>7</sub> 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<sub>7</sub> any additional information identified as being needed to process the application.

**B.167** 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  
~~Permits Branch~~**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.178** 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)(~~D~~)~~(i)~~ 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.189** 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),~~**(c)** without a prior permit revision, if each of the following conditions is met:

(1) \* \* \*

(2) \* \* \*

(3) \* \* \*

(4) The Permittee notifies the:

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

\* \* \*

- (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), (e), or (c). The Permittee shall make such records available, upon reasonable request, for public review.

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

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

\* \* \*

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 that meets the requirements of 326 IAC 2-7-6(1) by the "a responsible official" as defined by 326 IAC 2-7-1(34).

(c) \* \* \*

(d) \* \* \*

- (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.1920~~ Source Modification Requirement [326 IAC 2-7-10.5]

---

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

~~(b) — Any modification at an existing major source is governed by the requirements of 326 IAC 2-2.~~

~~B.204~~ Inspection and Entry [326 IAC 2-7-6][IC 13-14-2][IC 13-30-3-1][IC 13-17-3-2]

---

\* \* \*

~~B.221~~ 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  
~~Permits Branch~~ **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 ~~thea~~  
certification ~~by the~~**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) \* \* \*

~~B.223~~ 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) \* \* \*

(c) \* \* \*

~~B.234~~ Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

\* \* \*

~~B.245~~ Term of Conditions [326 IAC 2-1.1-9.5]

\* \* \*

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

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

\* \* \*

C.2 Overall Source Limit [326 IAC 2-2]

\* \* \*

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

~~Pursuant to Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 17, and A147-11471-00041, issued April 18, 2002, operation condition 17,~~ 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.5 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~~ **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 Fugitive Dust Emissions [326 IAC 6-4]

\* \* \*

C.7 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

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(a) \* \* \*

(b) The plan does not require thea certification **that meets the requirements of 326 IAC 2-7-6(1)** by thea “responsible official” as defined by 326 IAC 2-7-1(34).

C.8 Stack Height [326 IAC 1-7]

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

C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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~~The Permittee shall comply with the applicable requirements of 326 IAC 14-10, 326 IAC 18, and 40 CFR 61.140.~~

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

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

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

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

(A) **Asbestos removal or demolition start date;**

(B) **Removal or demolition contractor; or**

(C) **Waste disposal site.**

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

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

**All required notifications shall be submitted to:**

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

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

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

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

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

C.10 Performance Testing [326 IAC 3-6]

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

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

Indiana Department of Environmental Management  
Compliance ~~Data Section~~ 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) 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 ~~source~~ **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.11 Compliance Requirements [326 IAC 2-1.1-11]

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\* \* \*

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

C.12 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

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Unless otherwise specified in this permit, ~~for all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required~~ **allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such** monitoring ~~related to that equipment.~~ If due to circumstances beyond ~~its~~ **the Permittee's** control, ~~that~~ **any monitoring equipment required by this permit** cannot be installed and operated ~~within~~ **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, ~~MC64~~  
**MC 61-53** IGCN 1003  
Indianapolis, Indiana 46204-2251

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

The notification which shall be submitted by the Permittee does require ~~the~~ certification **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.13 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)][326 IAC 3-5]~~

---

- ~~(a) The Permittee shall calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEMS) and related equipment.~~

- ~~(b) All continuous emission monitoring systems shall meet all applicable performance specifications of 40 CFR 60 or any other performance specification, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.~~
- ~~(c) In the event that a breakdown of a continuous emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.~~
- ~~(d) Whenever a continuous emission monitor other than an opacity monitor is malfunctioning or is down for maintenance or repairs, the following shall be used as an alternative to continuous data collection:~~

~~Supplemental or intermittent monitoring of the parameter shall be implemented as specified in Section D of this permit until such time as the primary continuous emission monitoring system is back in operation, if the CEMS is not used to monitor NO<sub>x</sub> or SO<sub>2</sub> emissions pursuant to 40 CFR 75 or 326 IAC 10-4.~~

- ~~(e) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5 and Construction Permit 147-6713-00041, issued February 13, 1997.~~

~~C.14 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.1513 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.1614 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** ninety (90) days after the date of issuance of this permit.

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) \*\*\*~~
- ~~(d) \*\*\*~~
- ~~(e) \*\*\*~~

- (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.4715 Risk Management Plan [326 IAC 2-7-5(4211)] [40 CFR 68.245]**

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

**C.4816 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]**

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

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

(b) The response shall include minimizing the period of any startup, shutdown or malfunction ~~and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions.~~ **The response** may include, but ~~are~~**is** not limited to, the following:

- (1) initial inspection and evaluation;
- (2) recording that operations returned **or are returning** to normal without operator action (such as through response by a computerized distribution control system);  
or
- (3) any necessary follow-up actions to return operation to ~~within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.~~ **normal or usual manner of operation.**

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

- (1) \* \* \*
- (2) review of operation and maintenance procedures and records; **and/or**
- (3) \* \* \*

(d) \* \* \*

(e) The Permittee shall ~~maintain~~**record** the following records:

- ~~(1)~~ **monitoring data;**
- ~~(2)~~ **monitor performance data, if applicable; and**
- ~~(3)~~ **corrective actions****reasonable response steps** taken.

C.4917 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall ~~take appropriate response actions. The Permittee shall~~ submit a description of ~~these~~its response actions to IDEM, OAQ, ~~within thirty (30)~~ **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~~ **no later than** one hundred ~~twenty (120)~~ **eighty (180) days of receipt of** ~~the original~~ **date of the** test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred and ~~twenty (120)~~ **eighty (180) days** is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) \* \* \*

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

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

C.2018 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

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

- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
- (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purposes 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).

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

C.-2119 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. **Support information includes the following:**

- (AA) All calibration and maintenance records.
- (BB) All original strip chart recordings for continuous monitoring instrumentation.
- (CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following:

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

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

(b) Unless otherwise specified in this permit, **for** all record keeping requirements not already legally required, **the Permittee shall be implemented within 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 326 IAC 2-2-8(b)(6)(A), 326 IAC 2-2-8(b)(6)(B), 326 IAC 2-3-2(I)(6)(A), and/or 326 IAC 2-3-2(I)(6)(B)) that a "project"** (as defined in 326 IAC 2-2-1-(~~qq~~oo) and/or 326 IAC 2-3-1(~~jj~~)) at an existing emissions unit, **other than projects at a source with a Plantwide Applicability Limitation (PAL),** which is not part of a "major modification" (as defined in 326 IAC 2-2-1-(~~ee~~dd) and/or 326 IAC 2-3-1-(~~z~~)y) **may result in significant emissions increase** and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1-(~~rr~~pp) and/or 326 IAC 2-3-1-(~~mm~~),kk), the Permittee shall comply with following:

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

**326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj) at an existing emissions unit, document and maintain the following records:**

- (A) \* \* \*
- (B) \* \* \*
- (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) \* \* \*
- (ii) \* \* \*
- (iii) Amount of emissions excluded under section  
326 IAC 2-2-1(~~pp~~)(2)(A)(iii) and/or 326 IAC 2-3-  
1(~~kk~~)(2)(A)(~~3~~); and
- (iv) \* \* \*

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

- (1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
- ~~(3)~~(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. ~~2220~~ 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. **Proper notice submittal under Section B - Emergency Provisions satisfies the reporting requirements of this paragraph.** Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. **except that a deviation required to be reported pursuant to 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 ~~with~~ **not later than** thirty (30) days ~~after~~ the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include ~~the~~ **a certification that meets the requirements of 326 IAC 2-7-6(1) by the “a” “responsible official”** as defined by 326 IAC 2-7-1(34). **A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.**
- (b) ~~The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to~~ **address for report submittal is:**

Indiana Department of Environmental Management  
Compliance ~~Data Section~~ **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).~~
- (d) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.**
- (e) If the Permittee is required to comply with the recordkeeping provisions of ~~(ed)~~ in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 ~~(ee)(oo)~~ and/or 326 IAC 2-3-1-~~(ii)(jj)~~) 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)(ww)~~ and/or 326 IAC 2-3-1-~~(qq)(pp)~~, for that regulated NSR pollutant, and
  - (2) \* \* \*
- (f) The report for project at an existing emissions unit shall be submitted ~~withi~~**no later than** sixty (60) days after the end of the year and contain the following:
- (1) \* \* \*
  - (2) The annual emissions calculated in accordance with ~~(e)(2d)(1)~~ and ~~(32)~~ 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~~**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  
~~Air Compliance Section~~ **and Enforcement Branch**, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003

Indianapolis, Indiana 46204-2251

(g) \* \* \*

### Stratospheric Ozone Protection

#### C.2321 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 82.161.~~

### Changes to the D Sections of the Permit

#### General Changes Throughout the D Sections:

IDEM, OAQ has made changes to some of the standard language in conditions in the D Sections of the permit to help clarify the intent of these conditions. The following is a summary of the revisions that have been made throughout the D Sections 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 obligation with regard to the records required by this condition.
- (b) IDEM, OAQ has decided to clarify Section D - Testing Requirements to state that testing shall be done in accordance with 326 IAC 3-6 instead of in accordance with another permit condition that refers to 326 IAC 3-6.
- (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) IDEM, OAQ has included the replacement of an instrument as an acceptable action in the Parametric Monitoring Conditions.
- (e) IDEM, OAQ has decided to remove statements that indicate that BACT limits may be revised based upon stack testing. Emission limitations and control technologies established pursuant to 326 IAC 2-2 BACT review cannot be changed based upon stack test results alone. In order to change a BACT determination, a new top-down BACT analysis must be conducted based upon a review of current standards.
- (f) IDEM, OAQ has decided that control device failure detection conditions are more appropriately placed in the Compliance Determination Requirements portion of the D sections rather than the Compliance Monitoring Requirements portion when the control device is needed to comply with an applicable provision.
- (g) IDEM, OAQ has decided that the phrase "In order to ensure compliance with Condition..."

is more appropriate than In order to comply with Condition..." when specifying that a control device must be used to ensure compliance with a permit Condition in the Compliance Determination portion of the D sections.

- (h) IDEM, OAQ has decided that the language for bag failure in multi-compartment baghouses is more appropriately placed in the Compliance Monitoring Requirements portion of the D sections rather than the Compliance Determination Requirements portion because a bag failure in a multi-compartment baghouse does not necessarily indicate that the control device is unable to operate and control emissions. If a failure occurs in a multi-compartment baghouse, response steps should be taken. Additionally, the language for single compartment baghouse failure is more appropriately placed in the Compliance Determination portion of the D sections rather than the Compliance Monitoring portion of the D sections because failure of a single compartment baghouse that is needed to meet an emission limit is indicative of a deviation from the permit.
- (i) IDEM, OAQ has decided that parametric monitoring ranges specified in monitoring conditions shall be used "until" a new range is established in the latest stack test instead. Ranges established during the most recent stack test shall be used for determining whether or not response steps are required.

**Section D.4:**

- (j) Requirements for Continuous Emissions Monitoring (CEM) were consolidated into Section D.4 of the permit (removed from Section C) because this section contains the units required to have CEMs.
- (k) A paragraph was added to the testing requirement to indicate that CEMs could be used to satisfy the testing requirement.

**Section D.5:**

- (l) The requirements of 40 CFR 63, Subpart N were removed from Section D.5 of the permit. The applicable provisions of the rule are included in a new Section E.1 of the permit and the entire rule is included as Attachment A of the permit.
- (m) Compliance determination, compliance monitoring, and record keeping requirements were included in Section D.5 for the mesh pad mist elimination system in order to ensure compliance with PSD BACT limits.

**Section D.6:**

- (n) The descriptive information for the hydrogen batch annealing operations has been revised in A.3(g) of the permit.
- (o) The descriptive information for the tanks in A.3(g)(4)(D) and (E) has been revised based on the actual tank capacities.
- (p) PSD BACT limits for the three unpermitted hydrogen batch annealing furnaces, as determined in Appendix B of this TSD, were included in Section D.6 of the permit.
- (q) The requirements of 40 CFR 60, Subpart Kb were removed from Section D.6 of the permit. The applicable provisions are listed in a new Section E.2 of the permit and the entire rule is included as Attachment B of the permit.

**Section D.7:**

- (r) The compliance determination requirement in Section D.7 was revised for clarity and a record keeping requirement was added to document the compliance status of emission limitations.

**Section D.8:**

- (s) The requirements of 40 CFR 60, Subpart Dc were removed from Section D.8 and the applicable provisions are listed in a new Section E.3 of the permit. The entire rule is included as Attachment C of the permit.

**Section D.10:**

- (t) Compliance determination and recordkeeping requirements were added to Section D.10 of the permit to document the compliance status of VOC limitations.

The D Sections of the permit have been revised as follows:

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(145)]: * * *
---

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

D.1.1 Particulate Matter (PM/PM10) Best Available Control Technology (BACT) [326 IAC 2-2]

Pursuant to Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 21, and A147-11471-00041, issued April 18, 2002, operation condition 21, and 326 IAC 2-2-3 (PSD BACT), the processes of the Continuous Annealing and Pickling Line shall be limited as follows:

- (a) \* \* \*
- (b) \* \* \*
- (c) \* \* \*
- (d) \* \* \*
- (e) \* \* \*
- (f) \* \* \*
- (g) \* \* \*

~~For parts (b), (d), (e) and (g), the OAQ may revise this permit to adjust the total PM/PM10 limitation based upon the results of IDEM approved stack testing. The Department will provide an opportunity for public notice and comment prior to finalizing any permit revision. IC 13-15-7-3 (Revocation or Modification of a Permit: Appeal to Board) shall apply to this permit condition.~~

D.1.2 Nitrogen Oxides (NOx) Best Available Control Technology (BACT) [326 IAC 2-2]

\* \* \*

D.1.3 Nitrogen Oxides (NOx) PSD Best Available Control Technology (BACT) [326 IAC 2-2]

\* \* \*

Compliance Determination Requirements

D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) ~~Within five years after the most recent stack test or 36 months after issuance of this Part 70 permit, whichever is later, in order to demonstrate compliance with Conditions D.1.1, the Permittee shall perform PM and PM-10 testing for S06, S08, S09A, S09B, and S09C, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition. PM-10 includes filterable and condensable components. Testing shall be~~ In order to demonstrate compliance with Conditions D.1.1, the Permittee shall perform PM and PM-10 testing for S06, S08, S09A, S09B, and S09C, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this the most recent valid compliance demonstration. **Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition.** PM-10 includes filterable and condensable components. ~~Testing shall be~~

~~conducted in accordance with Section C - Performance Testing.~~

- (b) ~~Within five years after the most recent stack test, in order to demonstrate compliance with Conditions D.1.2 and D.1.3, the Permittee shall perform NOx testing for S07A, S07B, S09A, and S09B, utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing of the outlet NOx concentration and emissions from scrubber, identified as S09B, controlling the APL and CPL in SECTION D.2, and scrubbers S02 and S09A was performed on January 30, 2006. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with~~ **the provisions of 326 IAC 3-6 (Source Sampling). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.**

#### D.1.5 Control Equipment

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- (a) **In order to ensure compliance with Condition D.1.1, B**baghouses (S05, S08, S09C), shall be operated at all times and controlling PM when their respective emission units (shotblasting chamber, air quench station, electrolytic pickle, skin pass temper, and roll cleaning dust collection system) are in operation.
- (b) **In order to ensure compliance with Condition D.1.1, S**scrubbers (S06, S09A, S09B), shall be operated at all times when their respective emission units (alkaline cleaner, electrolytic pickle and rinse tanks, and mixed acids pickle and rinse tanks) are in operation.
- (c) **In the event that scrubber failure has been observed:**
- Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emission unit shall be shut down no later than the completion of the processing of the material in the line or emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).**

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

#### D.1.6 Visible Emissions Notations

---

- (a) **Daily** ~~visible emission notations of stack exhausts (S05, S06, S08, S09A, S09B, S09C) shall be performed. These notations shall be taken once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.~~
- (b) \* \* \*
- (c) \* \* \*
- (d) \* \* \*
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. ~~in accordance with Section C - Response to Excursions or Exceedances~~ **contains the Permittee's obligation with regard to the response steps required by this condition.** Failure to take response steps ~~in accordance with Section C – Response to Excursions or Exceedances,~~ shall be considered a deviation from this permit.

#### D.1.7 Parametric Monitoring for Baghouses

---

- (a) The Permittee shall record the pressure drop across the baghouses (S05, S08, S09C) used in conjunction with the APL at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 0.3 and 8.0 inches of water ~~or until a new range is established during the latest stack test, the Permittee shall take reasonable response steps. in accordance with~~ Section C- Response to Excursions or Exceedances **contains the Permittee's obligation with regard to the response steps required by this condition.** A pressure

reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~, shall be considered a deviation from this permit.

- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated **or replaced** at least once every six (6) months.

**D.1.8 Broken or Failed Bag Detection - Multi-Compartment Baghouse**

\* \* \*

**D.1.9 Parametric Monitoring for Scrubbers**

- (a) The Permittee shall record the pH of the scrubbing liquid (if applicable), pressure drop and scrubbing liquid flow rate of the scrubbers (S06, S09A, S09B) used in conjunction with the APL at least once per day when the process is in operation. When for any one reading each parametric range or the minimum operating parameter for the scrubbers in ~~the below table is outside its normal~~ **the range listed in the table below, or until a new range is established during the latest stack test**, the Permittee shall take reasonable response steps. ~~in accordance with Section C - Response to Excursions or Exceedances~~ **contains the Permittee's obligation with regard to the response steps required by this condition.** A reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances~~, shall be considered a deviation from this permit.

Scrubber ID	Pressure Drop Range across the Scrubber (inches)	Minimum Flow Rate of Scrubbing Liquor (gallons/minute)	pH of Scrubbing Liquor
APL/CPL Mixed Scrubber (S09B)	0.25 - 5.0	250	8.0 - 12.5
Electrolytic Pickle & Rinse Tanks Scrubber (S09A)	0.5 - 5.5	550	N/A
Alkaline Cleaner Scrubber (S06)	1.0 - 8.0	300	N/A

- (b) The instruments used for determining the pH of the scrubbing liquid (if applicable), pressure drop, and scrubbing liquid flow rate at the inlet of the control device shall be subject to approval by IDEM, OAQ, and shall be calibrated **or replaced** at least once every six (6) months.

~~D.1.10 Scrubber Failure~~

~~In the event that failure of a scrubber has been observed, if operations will continue for ten (10) days or more after the failure is observed before the failed system will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed system will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.~~

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

~~D.1.104~~ Record Keeping Requirements

- (a) To document **the compliance status** with Condition D.1.2(b), the Permittee shall maintain hourly records of the "smoke and anneal" operational practice.
- (b) To document **the compliance status** with Condition D.1.6, the Permittee shall maintain records of the daily visible emission notations for stacks S05, S06, S08, S09A, S09B, and S09C. **The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (e.g., the process did not operate that day).**

- (c) To document **the compliance status** with Condition D.1.7, the Permittee shall maintain ~~once per day~~**daily** records of the pressure drop across the baghouses (S05, S08, S09C). **The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the process did not operate that day).**
- (d) To document **the compliance status** with Condition D.1.9, the Permittee shall maintain ~~once per day~~**daily** records of the pressure drop across the scrubbers (S06, S09A, S09B). **The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the process did not operate that day).**
- (e) To document **the compliance status** with Condition D.1.9, the Permittee shall maintain ~~once per day~~**daily** records of the pH<sub>T</sub> and flow rate of the scrubbing liquor from scrubbers (S06, S09A, S09B). **The Permittee shall include in its daily record when a pH and/or flow rate reading is not taken and the reason for the lack of reading (e.g., the process did not operate that day).**
- (f) ~~All records shall be maintained in accordance with Section C - General Record Keeping Requirements~~ **contains the Permittee's obligation with regard to the records required by this condition.** ~~, of this permit. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.~~

## SECTION D.2

## FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(154)]:

\* \* \*

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

### D.2.1 Particulate Matter (PM/PM10) Best Available Control Technology (BACT) [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Best Available Control Technology), Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 22, and A147-11471-00041, issued April 18, 2002, and 326 IAC 2-2 (PSD BACT), the processes of the continuous pickling line (CPL) shall be limited as follows:

- (a) \* \* \*
- (b) \* \* \*
- (c) \* \* \*
- (d) \* \* \*

~~For parts (a) and (b), the OAQ may revise this permit to adjust the total PM/PM10 limitation based upon the results of IDEM approved stack testing. The Department will provide an opportunity for public notice and comment prior to finalizing any permit revision. IC 13-15-7-3 (Revocation or Modification of a Permit: Appeal to Board) shall apply to this permit condition.~~

### D.2.2 Nitrogen Oxides (NOx) Best Available Control Technology (BACT) [326 IAC 2-2]

\* \* \*

### D.2.3 Hazardous Air Pollutants

\* \* \*

Compliance Determination Requirements

### D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) ~~Within five years after the most recent stack test or 36 months after issuance of this Part~~

~~70 permit, whichever is later, in order to demonstrate compliance with Condition D.2.1, the Permittee shall perform PM and PM-10 testing for S01 and S02 utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the testing required by this condition. PM-10 includes filterable and condensable components PM. Testing shall be conducted in accordance with Section C – Performance Testing.~~

- (b) ~~Within five years after the most recent stack test, in order to demonstrate compliance with Condition D.2.2, the Permittee shall perform NOx testing for S02, S09A, and S09B, utilizing methods as approved by the Commissioner. Testing of the outlet NOx concentration and emissions from the scrubber, identified as S09B, controlling the CPL and APL in SECTION D.1, and scrubbers S02 and S09A was performed on January 30, 2006. This test shall be repeated at least once every five (5) years from the date of this the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the testing required by this condition.~~

#### D.2.5 Particulate Matter (PM) Control

---

- (a) **In order to ensure compliance with Condition D.2.1, B**baghouse (S01) shall be operated at all times and controlling PM when the strip leveler and mechanical scale breaker are in operation.
- (b) **In order to ensure compliance with Condition D.2.1, S**scrubber S02 shall be operated at all times and controlling PM when the three (3) HCl acid pickle and rinse tanks are in operation.
- (c) **In the event that scrubber failure has been observed:**
- Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emission unit shall be shut down no later than the completion of the processing of the material in the line or emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).**

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

#### D.2.6 Visible Emissions Notations

---

- (a) **Daily v**isible emission notations of stacks **exhaust from S01 and S02** shall be performed. ~~These notations shall be taken once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.~~
- (b) \* \* \*
- (c) \* \* \*
- (d) \* \* \*
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. ~~in accordance with Section C - Response to Excursions or Exceedances~~ **contains the Permittee's obligation with regard to the response steps required by this condition.** Failure to take response steps ~~in accordance with Section C – Response to Excursions or Exceedances,~~ shall be considered a deviation from this permit.

#### D.2.7 Parametric Monitoring for Baghouse

---

- (a) The Permittee shall record the pressure drop across the baghouse (S01) used in conjunction with the CPL at least once per day when the process is in operation. When

for any one reading, the pressure drop across the baghouse is outside the normal range of 1.5 and 5.0 inches of water ~~or until a new range is established during the latest stack test, the Permittee shall take reasonable response steps. in accordance with Section C- Response to Excursions or Exceedances~~ **contains the Permittee's obligation with regard to the response steps required by this condition.** A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances,~~ shall be considered a deviation from this permit.

- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated **or replaced** at least once every six (6) months.

**D.2.8 Broken or Failed Bag Detection - Multi-Compartment Baghouse**

\* \* \*

**D.2.9 Parametric Monitoring for Scrubber**

- (a) The Permittee shall record the pH of the scrubbing liquid, pressure drop and scrubbing liquid flow rate of scrubbers S02, S09A, and ~~S009B~~ at least once per day when the process is in operation. When for any one reading each parametric range or the minimum operating parameter for the scrubbers in **the below table** is outside its normal range **in the table below**, ~~or until a new range is established during the latest stack test, the Permittee shall take reasonable response steps. in accordance with Section C- Response to Excursions or Exceedances~~ **contains the Permittee's obligation with regard to the response steps required by this condition.** A reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances,~~ shall be considered a deviation from this permit.

Scrubber ID	Pressure Drop Range across the Scrubber (inches)	Minimum Flow Rate of Scrubbing Liquor (gallons/minute)	pH of Scrubbing Liquor
APL/CPL Mixed Scrubber (S09B)	0.25 - 5.0	250	8.0 - 12.5
Electrolytic Pickle & Rinse Tanks Scrubber (S09A)	0.5 - 5.5	550	N/A
CPL HCL Scrubber (S02)	0.5 - 6.0	250	5.5 - 9.5

- (b) The instruments used for determining the pH of the scrubbing liquid, pressure drop, and scrubbing liquid flow rate at the inlet of the control device shall be subject to approval by IDEM, OAQ, and shall be calibrated **or replaced** at least once every six (6) months.

**D.2.10 Scrubber Failure**

~~In the event that failure of a scrubber (S02) has been observed, if operations will continue for ten (10) days or more after the failure is observed before the failed system will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed system will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.~~

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

**D.2.140 Record Keeping Requirements**

- (a) To document **the compliance status** with Condition D.2.6, the Permittee shall maintain records of the daily visible emission notations for stacks S01 and S02. **The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (e.g., the process did not operate that day).**

- (b) To document **the compliance status** with Condition D.2.7, the Permittee shall maintain ~~once per day~~**daily** records of the pressure drop across the baghouse S01. **The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the process did not operate that day).**
- (c) To document **the compliance status** with Condition D.2.9, the Permittee shall maintain ~~once per day~~**daily** records of the pressure drop across the scrubbers S02, S09A, and S09B. **The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the process did not operate that day).**
- (d) To document **the compliance status** with Condition D.2.9, the Permittee shall maintain ~~once per day~~**daily** records of the pH<sub>T</sub> and flow rate of the scrubbing liquor from scrubbers S02, S09A, and S09B. **The Permittee shall include in its daily record when a pH and/or flow rate reading is not taken and the reason for the lack of reading (e.g., the process did not operate that day).**
- (e) ~~All records shall be maintained in accordance with Section C - General Record Keeping Requirements~~ **contains the Permittee's obligation with regard to the records required by this condition.**, of this permit. ~~Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.~~

### SECTION D.3

### FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(145)]:

\* \* \*

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

D.3.1 Particulate Matter (PM/PM10) Best Available Control Technology (BACT) [326 IAC 2-2]

- (a) \* \* \*
- (b) \* \* \*

~~For parts (a) and (b), the OAQ may revise this permit to adjust the total PM/PM10 limitation based upon the results of IDEM approved stack testing. The Department will provide an opportunity for public notice and comment prior to finalizing any permit revision. IC 13-15-7-3 (Revocation or Modification of a Permit: Appeal to Board) shall apply to this permit condition.~~

D.3.2 Opacity Best Available Control Technology [326 IAC 2-2]

\* \* \*

Compliance Determination Requirements

D.3.3 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

~~Within five years after the most recent stack test or 36 months after issuance of this Part 70 permit, whichever is later, in order to demonstrate compliance with Condition D.3.1, the Permittee shall perform PM and PM-10 testing for S11 and S16 utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this~~ **the most recent** valid compliance demonstration. ~~PM-10 includes filterable and condensable components.~~ Testing shall be conducted in accordance with **the provisions of 326 IAC 3-6 (Source Sampling Procedures)**. Section C - Performance Testing **contains the Permittee's obligation with regard to the testing required by this condition. PM10 includes filterable and condensable PM.**

#### D.3.4 Particulate Matter (PM) Control

---

(a) **In order to ensure compliance with Condition D.3.1, Each mist elimination system (S11, S16) shall be in operation at all times when the temper mill and cold reduction mills are in operation.**

(b) **In the event that mist elimination system failure has been observed:**

**Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emission unit shall be shut down no later than the completion of the processing of the material in the line or emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).**

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

#### D.3.5 Visible Emissions Notations

---

(a) **Daily** ~~visible~~ visible emission notations of stack exhausts S11 and S16 shall be performed ~~once per day~~ during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) \* \* \*

(c) \* \* \*

(d) \* \* \*

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. ~~in accordance with Section C- Response to Excursions or Exceedances~~ **contains the Permittee's obligation with regard to the response steps required by this condition.** Failure to take response steps ~~in accordance with Section C – Response to Excursions or Exceedances,~~ shall be considered a deviation from this permit.

#### D.3.6 Parametric Monitoring

---

(a) The Permittee shall record the pressure drop of the mist elimination systems (S11, S16) used in conjunction with the CCM at least once per day when in operation. When for any one reading, the pressure drop across the systems are outside their normal range, ~~or~~ **until a new range is established during the latest stack test, the Permittee shall take reasonable response steps. in accordance with Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition.** A reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps ~~in accordance with Section C – Response to Excursions or Exceedances,~~ shall be considered a deviation from this permit.

(b) The instruments used for determining the pressure drop shall be subject to approval by IDEM, OAQ, and shall be calibrated **or replaced** at least once every six (6) months.

#### ~~D.3.7 Mist Eliminator Failure~~

---

~~In the event that a mist elimination system's failure has been observed, if operations will continue for ten (10) days or more after the failure is observed before the failed system will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed system will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.~~

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

#### D.3.87 Record Keeping Requirements

---

(a) To document **the** compliance **status** with Condition D.3.5, the Permittee shall maintain records of the daily visible emission notations for stacks S11 and S16. **The Permittee**

**shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (e.g., the process did not operate that day).**

- (b) To ~~show document the~~ compliance **status** with condition D.3.6, the Permittee shall maintain **daily** records of the pressure drop across each mist eliminators (S11, S16). **The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the process did not operate that day).**
- (c) ~~All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.~~ **contains the Permittee's obligation with regard to the records required by this condition.**

#### SECTION D.4

#### FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(145)]:

\* \* \*

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

##### D.4.1 Particulate Matter (PM/PM10) Best Available Control Technology (BACT) [326 IAC 2-2]

\* \* \*

~~The OAQ may revise this permit to adjust the total PM/PM10 limitation based upon the results of IDEM approved stack testing. The Department will provide an opportunity for public notice and comment prior to finalizing any permit revision. IC 13-15-7-3 (Revocation or Modification of a Permit: Appeal to Board) shall apply to this permit condition.~~

##### D.4.2 Nitrogen Oxides (NOx) Best Available Control Technology (BACT) [326 IAC 2-2]

\* \* \*

##### D.4.3 Continuous Galvanizing Line Processes Best Available Control Technology (BACT) [326 IAC 2-2]

\* \* \*

#### Compliance Determination Requirements

##### D.4.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) ~~Within five years after the most recent stack test or 36 months after issuance of this Part 70 permit, whichever is later, in order to demonstrate compliance with Conditions D.4.1 and D.4.2, the Permittee shall perform PM and PM-10 testing for S17, and NOx testing for S18 utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this~~ **the most recent** valid compliance demonstration. ~~PM-10 includes filterable and condensible components.~~ Testing shall be conducted in accordance with **the provisions of 326 IAC 3-6 (Source Sampling Procedures)**. Section C - Performance Testing **contains the Permittee's obligation with regard to the testing required by this condition.** **PM10 includes filterable and condensible PM.**
- (b) **Testing using a continuous emissions monitoring system (CEMS) that meets the requirements of 326 IAC 3-5 (Continuous Monitoring of Emissions), and after it has been certified, may be used to comply with D..4(a).**

##### D.4.5 Particulate Matter (PM) Control [326 IAC 2-2]

- (a) \* \* \*

**(b) In order to ensure compliance with Condition D.4.1, the scrubber (S17) shall be in operation and control particulate emissions from the alkaline cleaning baths and rinse tanks at all times the alkaline cleaning baths and rinse tanks are in operation.**

**(c) In the event that scrubber failure has been observed:**

**Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emission unit shall be shut down no later than the completion of the processing of the material in the line or emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).**

**D.4.6 Nitrogen Oxides (NOx) Control [326 IAC 2-2]**

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To control NOx emissions and:

**(a) \* \* \***

**(b) \* \* \***

**(c) In the event that selective catalytic reduction system failure has been observed:**

**Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emission unit shall be shut down no later than the completion of the processing of the material in the line or emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).**

**D.4.7 Continuous Emissions Monitoring [326 IAC 3-5]**

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~~(a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions) the continuous emission monitoring system for the selective catalytic reduction control (SCR) unit shall be calibrated, maintained, and operated for measuring NOx, thereby meeting the performance specifications of 326 IAC 3-5-2.~~

~~(b) The Permittee shall continuously monitor and record NOx emissions from the SCR control unit. This activity shall be conducted in accordance with 326 IAC 3-5.~~

**(a) In order to demonstrate compliance with Condition D.4.2, the Permittee shall calibrate, maintain, certify, and operate a continuous emissions monitoring system (CEMS) and related equipment for measuring NOx emissions from the annealing furnace stack exhaust (S18) in accordance with 326 IAC 3-5.**

**(b) The NOx CEMS shall continuously measure the NOx emission rate and shall be operated at all times the annealing furnace is in operation except for system breakdowns, repairs, calibration checks, and zero and span adjustments.**

**(c) The continuous emission monitoring system (CEMS) shall measure NOx emission rates in pounds per hour. The use of CEMS to measure and record the NOx hourly emission rates over a three (3) hour operating block averaging period is sufficient to demonstrate compliance with the limitations established in condition D.4.2. The source shall maintain records of emission rates in pounds per hour.**

**(d) Whenever a continuous emission monitor is malfunctioning or is down for maintenance or repairs, the Permittee shall follow the compliance monitoring requirements in Condition D.4.10.**

**(e) Nothing in the permit shall excuse the Permittee from complying with the**

**requirements to operate a CEMS pursuant to 40 CFR 60.**

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

D.4.8 Visible Emissions Notations

- (a) ~~Visible~~ **Daily** visible emission notations of the stack exhaust S17 shall be performed. ~~These notations shall be performed once per day during normal~~ daylight hours when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) \* \* \*
- (c) \* \* \*
- (d) \* \* \*
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. ~~in accordance with Section C - Response to Excursions or Exceedances~~ **contains the Permittee's obligation with regard to the response steps required by this condition.** Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances,~~ shall be considered a deviation ~~of~~ **from** this permit.

D.4.9 Parametric Monitoring for Scrubber

- (a) The Permittee shall record the pressure drop and scrubbing liquid flow rate of scrubber S17 at least once per day when the process is in operation. When for any one reading, the pressure drop across the scrubber **or the scrubbing liquid flow rate** is outside its ~~their~~ normal range, ~~or until a new range is~~ established during the latest stack test, the Permittee shall take reasonable response steps. ~~in accordance with Section C- Response to Excursions or Exceedances~~ **contains the Permittee's obligation with regard to the response steps required by this condition.** A reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances,~~ shall be considered a deviation from this permit.
- (b) The instruments used for determining the pressure drop, and scrubbing liquid flow rate at the inlet of the control device shall be subject to approval by IDEM, OAQ, and shall be calibrated **or replaced** at least once every six (6) months.

D.4.10 Scrubber Failure

~~In the event that failure of the scrubber has been observed, if operations will continue for ten (10) days or more after the failure is observed before the failed system will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed system will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.~~

D.4.11 Selective Catalytic Reduction System Failure

~~In the event that the SCR's failure has been observed, if operations will continue for ten (10) days or more after the failure is observed before the failed system will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed system will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.~~

D.4.12 Continuous Emission Monitoring

~~The Permittee shall calibrate, maintain, certify, and operate the continuous monitoring system for the measurement of the NO<sub>x</sub> emissions discharged into the atmosphere from S18 in accordance with 326 IAC 3-5-2 and 3-5-7.~~

- (a) ~~The continuous emission monitoring system (CEMS) shall measure NO<sub>x</sub> emission rates in pounds per hour. The use of CEMS to measure and record the NO<sub>x</sub> hourly emission rates over a three (3) hour operating block averaging period is sufficient to demonstrate compliance with the limitations~~

~~established in condition D.4.2. The source shall maintain records of emission rates in pounds per hour.~~

~~(b) The Permittee shall demonstrate compliance with Condition D.4.2 utilizing data from the NO<sub>x</sub> CEMS, the fuel flow meter, and Method 19 calculations.~~

#### D.4.103 NO<sub>x</sub> Monitoring System Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(3)]

Whenever the NO<sub>x</sub> continuous emission monitoring system is malfunctioning or down for repairs or adjustments, the following method shall be used to provide information related to NO<sub>x</sub> emissions:

Monitoring of the SCR operating parameters for ammonia flow rate and inlet duct temperature, shall be implemented. The parameters are as follows:

- (a) The Permittee shall record the ammonia flow rate and inlet duct temperature at least four (4) times per hour until the primary CEM or a backup CEM is brought online and functioning properly. The Preventive Maintenance Plan for the SCR shall contain troubleshooting contingency and corrective actions for when the readings are outside of the normal range for any one reading during downtime of the NO<sub>x</sub> CEMS. When for any one reading, the ammonia flow rate and inlet duct temperature are outside the normal range during downtime of the NO<sub>x</sub> CEMS, the Permittee shall take reasonable response steps. ~~in accordance with Section C – Response to Excursions or Exceedances~~ **contains the Permittee's obligation with regard to the response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.**
- (b) The instrument used for determining the ammonia flow rate and inlet duct temperature shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated **or replaced** at least once every six (6) months.

~~Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, shall be considered a deviation from this permit.~~

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

##### D.4.114 Record Keeping Requirements

- (a) To document **the compliance status** with conditions D.4.2 and D.4.7, the Permittee shall maintain records of the emission rates of NO<sub>x</sub> in pounds per hour **and shall perform the required record keeping in accordance with 326 IAC 3-5.**
- (b) To document **the compliance status** with condition D.4.8, the Permittee shall maintain **daily** records of visible emission notations for stack S17. **The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (e.g., the process did not operate that day).**
- (c) To document **the compliance status** with condition D.4.9, the Permittee shall maintain ~~once per day~~ **daily** records of the pressure drop across the scrubber S17 and scrubbing liquid flow rate. **The Permittee shall include in its daily record when a pressure drop and/or liquid flow rate reading is not taken and the reason for the lack of reading (e.g., the process did not operate that day).**
- ~~(d) To document compliance with condition D.4.12, the Permittee shall record the output of the CEM system and shall perform the required record keeping and reporting in accordance with 326 IAC 3-5-6 and 326 IAC 3-5-7, respectively.~~
- (ed) To document **the compliance status** with condition D.4.103, the Permittee shall record the ammonia flow rate and inlet duct temperature of the SCR at least four (4) times per hour until the primary CEMS or a backup CEMS is brought online. **The Permittee shall**

**include in its record, the downtime of the CEMS, reasons of the breakdown, efforts to correct the problem, and when an ammonia flow rate and/or inlet duct temperature reading is not taken during the CEMS downtime and the reason for the lack of a reading (e.g., the process did not operate during that time).**

- (fe) ~~All records shall be maintained in accordance with Section C - General Record Keeping Requirements~~ **contains the Permittee's obligation with regard to the records required by this condition.**, of this permit. ~~Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.~~

#### D.4.125 Reporting Requirements

**(a) The Permittee shall perform the required reporting in accordance with 326 IAC 3-5.**

**(ab)** A written report of excess emissions measured by the continuous emissions monitor shall be submitted each calendar quarter ~~to the addresses listed in Section C - General Reporting Requirements, of this permit,~~ using the reporting forms located at the end of this permit, or their equivalent, ~~within no later than thirty (30) days after the end of the quarter being reported.~~ **Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition.** Pursuant to 326 IAC 3-5-7, the averaging periods used to determine excess emissions shall be three hour block periods ending at 03:00, 06:00, 09:00, 12:00, 15:00, 18:00, 21:00, and 24:00. The excess emissions report shall consist of the following:

- (1) A description of the nature and cause of the excess emissions, if known.
- (2) The date and time identifying each period during which the continuous monitoring system was inoperative or malfunctioning, except for zero and span checks, and the nature of the system repair or adjustments.
- (3) When no excess emissions have occurred and the continuous monitoring system has not been inoperative, repaired, or adjusted.

**(bc)** ~~The reports described in part paragraphs (a) and (b) of this condition as submitted by the Permittee~~ **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).**

#### SECTION D.5

#### FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(145)]:

\* \* \*

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

D.5.1 Particulate Matter (PM) Best Available Control Technology (BACT) [326 IAC 2-2]

\* \* \*

D.5.2 ~~General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR Part 63, Subpart A]~~ **Hazardous Air Pollutants**

**(a)** ~~The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 63, Subpart N. The Permittee shall comply with the requirements of this condition on and after the compliance date for the tanks.~~

**(b)** \* \* \*

D.5.3 Chromium Electroplating and Anodizing NESHAP [326 IAC 20-8-1] [40 CFR Part 63, Subpart N]

The provisions of 40 CFR 63, Subpart N – National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks, which are incorporated by reference as 326 IAC 20-8-1, apply to the electrolytic chrome dip tanks. The Permittee shall comply with the requirements of this condition on and after the compliance date for the tank.

D.5.4 Chromium Emissions Limitation [40 CFR 63.342(c)] [40 CFR 63.343(a)(1)&(2)]

(a) The emission limitations in this condition apply only during tank operation, and also apply during periods of startup and shutdown as these are routine occurrences for tanks subject to 326 IAC 20-8-1. The emission limitations do not apply during periods of malfunction.

(b) The hard chromium electroplating tank, identified as 1 East and 2 West above, is considered a large, new hard chromium electroplating operation. During tank operation, the Permittee shall control chromium emissions discharged to the atmosphere from the tank by not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.015 mg/dscm [ $6.6 \times 10^{-6}$  -gr/dscf].

D.5.5 Work Practice Standards [40 CFR 63.342(f)]

The following work practice standards apply to the electrolytic chrome dip tanks:

(a) At all times, including periods of startup, shutdown, malfunction and excess emissions, the Permittee shall operate and maintain the tanks, composite mesh pad, the mesh pad mist elimination system (S15) and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the Operation and Maintenance Plan (OMP) required by Condition D.5.6.

(b) Malfunctions and excess emissions shall be corrected as soon as practicable after their occurrence in accordance with the OMP required by Condition D.5.6.

(c) These operation and maintenance requirements are enforceable independent of emissions limitations or other requirements in this section.

(d) Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to IDEM, OAQ, which may include, but is not limited to, monitoring results; review of the OMP, procedures, and records; and inspection of the source.

(e) Based on the results of a determination made under paragraph (d) of this condition, IDEM, OAQ may require that the Permittee make changes to the OMP required by Condition D.5.6. Revisions may be required if IDEM, OAQ finds that the plan:

(1) Does not address a malfunction or period of excess emissions that has occurred;

(2) Fails to provide for the operation of the electrolytic chrome dip tanks, the composite mesh pad, or the mesh pad mist elimination system and process monitoring equipment during a malfunction or period of excess emissions in a manner consistent with good air pollution control practices; or

(3) Does not provide adequate procedures for correcting malfunctioning process equipment, composite mesh pad, monitoring equipment or other causes of excess emissions as quickly as practicable.

For the electrolytic chrome dip tanks, the Permittee shall comply with the requirements of this condition on and after the start-up date of each tank.

The work practice standards that address operation and maintenance must be followed during malfunctions and periods of excess emissions.

D.5.6 Operation and Maintenance Plan [40 CFR 63.342(f)(3)]

(a) ~~The Permittee shall prepare an Operation and Maintenance Plan (OMP) to be implemented no later than the startup date of the electrolytic chrome dip tanks. The OMP shall specify the operation and maintenance criteria for the tanks, the composite mesh-pad, the mesh pad mist elimination system and monitoring equipment and shall include the following elements:~~

(1) ~~For the composite mesh-pad system (CMP):~~

(A) ~~Quarterly visual inspections of the device to ensure there is proper drainage, no chromic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device.~~

(B) ~~Quarterly visual inspection of the back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist.~~

(C) ~~Quarterly visual inspection of the duct work from the tank to the control device to ensure there are no leaks.~~

(D) ~~Perform washdown of the composite mesh-pads in accordance with manufacturers' recommendations.~~

(2) ~~A standardized checklist to document the operation and maintenance criteria for the electrolytic chrome dip tanks, the air pollution control device, the add-on air pollution control device and the monitoring equipment.~~

(3) ~~Procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions or periods of excess emissions as indicated by monitoring data do not occur.~~

(4) ~~A systematic procedure for identifying malfunctions and periods of excess emissions of the electrolytic chrome dip tanks, the air pollution control device, the add-on air pollution control device and monitoring equipment; and for implementing corrective actions to address such malfunctions and periods of excess emissions.~~

(b) ~~The Permittee may use applicable standard operating procedures (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans such as the PMP required in this condition as the OMP, provided the alternative plans meet the above listed criteria in Condition D.5.6(a).~~

(c) ~~If the OMP fails to address or inadequately addresses an event that meets the characteristics of a malfunction or period of excess emissions at the time the plan is initially developed, the Permittee shall revise the OMP within forty-five (45) days after such an event occurs. The revised plan shall include procedures for operating and maintaining the electrolytic chrome dip tanks, the air pollution control device, the add-on air pollution control device and the monitoring equipment, during similar malfunction or period of excess emissions events, and a program for corrective action for such events.~~

(d) ~~If actions taken by the Permittee during periods of malfunction or period of excess emissions are inconsistent with the procedures specified in the OMP, the Permittee shall record the actions taken for that event and shall report by phone such actions within two (2) working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within seven (7) working days after the end of the event, unless the Permittee makes alternative reporting arrangements, in advance, with IDEM, OAQ.~~

(e) ~~The Permittee shall keep the written OMP on record after it is developed to be made available, upon request, by IDEM, OAQ for the life of the electrolytic chrome dip tanks or until the tanks are no longer subject to the provisions of 40 CFR 63.340. In addition, if the OMP is revised, the Permittee shall keep previous versions of the OMPs on record to be~~

~~made available for inspection, upon request by IDEM, OAQ for a period of five (5) years after each revision to the plan.~~

Compliance Determination Requirements [326 IAC 2-1.1-11] [326 IAC 2-7-6(1)]

### **D.5.3 Particulate Matter (PM) Control**

---

- (a) In order to ensure compliance with Condition D.5.1(a), the mesh pad mist elimination system shall be in operation and control particulate emissions from each hard chromium electroplating tank at all times that each hard chromium electroplating tank is in operation.
- (b) In the event that mesh pad mist elimination system failure has been observed:  
  
Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emission unit shall be shut down no later than the completion of the processing of the material in the line or emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).
- (c) In order to ensure compliance with Condition D.5.1(b), the baghouse shall be in operation and control particulate emissions from the electrodischarge texturing machine tank at all times that the electrodischarge texturing machine tank is in operation.
- (d) For a single compartment baghouse or bin vent filter controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (e) For a single compartment baghouse or bin vent filter controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

~~D.5.7 Performance Testing [326 IAC 2-1.1-1][326 IAC 2-7-6(1)][40 CFR 63.343(b)(2)] [40 CFR 63.7] [40 CFR 63.344]~~

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- ~~(a) A performance test demonstrating initial compliance for tanks 1 and 2 was performed on January 20, 1999.~~

~~During the initial performance test conducted on January 20, 1999, it was determined that the average pressure drop across the composite mesh pad system was 4.0 inches of water and the average outlet chromium concentration is 0.00336 mg/dscm.~~

- ~~(b) The Permittee is not required to further test the electrolytic chrome dip tanks by this permit. However, the IDEM may require testing when necessary to determine if the tanks are in compliance. If testing is required by the IDEM, compliance with the limit specified in Conditions D.5.1(a) and D.5.4 shall be determined by a performance test conducted in~~

~~accordance with 40 CFR 63.344 and Section C – Performance Testing.~~

- ~~(c) Any change, modification, or reconstruction of the electrolytic chrome dip tanks, the composite mesh pad, the mesh pad mist elimination system or monitoring equipment may require additional performance testing conducted in accordance with 40 CFR 63.344 and Section C – Performance Testing.~~

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

#### **D.5.4 Parametric Monitoring for Mesh Pad Mist Elimination System**

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- (a) **The Permittee shall record the pressure drop across the mesh pad mist elimination system (S15) at least once per day when a hard chromium electroplating tank is in operation. When for any one reading, the pressure drop across the system is outside the normal range, or a range established during the most recent valid compliant stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. A pressure drop reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.**
- (b) **The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.**

#### **D.5.5 Parametric Monitoring for Baghouses**

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- (a) **The Permittee shall record the pressure drop across the baghouse controlling the electrodischarge texturing machine at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.5 to 5.0 inches of water, until a new range is established during the latest stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.**
- (b) **The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.**

#### ~~D.5.8 Monitoring to Demonstrate Continuous Compliance [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] [40 CFR 63.343(c)]~~

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- ~~(a) Pursuant to 40 CFR 63.343(c)(1)(ii), when using a composite mesh pad system to comply with the limit specified in Condition D.5.4, the Permittee shall monitor and record the pressure drop across the composite mesh pad system during tank operation once each day when a hard chromium electroplating tank is operating. To be in compliance with the standards, the composite mesh pad system shall be operated within  $\pm 1$  inch of water column of the pressure drop value established during the initial performance test, or within the range of compliant values for pressure drop established during multiple performance tests.~~
- ~~(b) Tank operation or operating time is defined as that time when a part is in the tank and the rectifier is turned on. If the amount of time that no part is in the tank is fifteen minutes or longer, that time is not considered operating time. Likewise, if the amount of time between placing parts in the tank (i.e., when no part is in the tank) is less than fifteen minutes, that time between plating the two parts is considered operating time.~~

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

D.5.69 Record Keeping Requirements [326 IAC 2-7-5(3)]~~[40 CFR 63.346]~~

- (a) **To document the compliance status with Condition D.5.4, the Permittee shall maintain daily records of the pressure drop across the mesh pad mist elimination system (S15). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the process did not operate that day).**
- (b) **To document the compliance status with Condition D.5.5, the Permittee shall maintain daily records of the pressure drop across the baghouse used in conjunction with the electrodischarge texturing machine. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the process did not operate that day).**
- (c) **Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.**

~~The Permittee shall maintain records to document compliance with Conditions D.5.1, D.5.2 and D.5.3. These records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit and include a minimum of the following:~~

- ~~(a) — Inspection records for the composite mesh pad system, the mesh pad mist elimination system and monitoring equipment to document that the inspection and maintenance required by Condition D.5.6 has taken place. The record can take the form of a checklist and should identify the following:
  - ~~(1) — The device inspected;~~
  - ~~(2) — The date of inspection;~~
  - ~~(3) — A brief description of the working condition of the device during the inspection, including any deficiencies found; and~~
  - ~~(4) — Any actions taken to correct deficiencies found during the inspection, including the date(s) such actions were taken.~~~~
- ~~(b) — Records of all maintenance performed on the electrolytic chrome dip tanks, the mist elimination system and monitoring equipment.~~
- ~~(c) — Records of the occurrence, duration, and cause (if known) of each malfunction of the electrolytic chrome dip tanks, the composite mesh pad system and monitoring equipment.~~
- ~~(d) — Records of the occurrence, duration, and cause (if known) of each period of excess emissions of the electrolytic chrome dip tanks, the composite mesh pad system and monitoring equipment as indicated by monitoring data collected in accordance with this condition.~~
- ~~(e) — Records of actions taken during periods of malfunction or excess emissions when such actions are inconsistent with the OMP.~~
- ~~(f) — Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the OMP.~~
- ~~(g) — Test reports documenting results of all performance tests.~~

- ~~(h) All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance.~~
- ~~(i) Records of monitoring data required by 40 CFR 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected.~~
- ~~(j) The total process operating time, as defined in Condition D.5.7(b), of each tank, during the reporting period.~~
- ~~(k) Records of the actual cumulative rectifier capacity of each hard chromium electroplating tank expended during each month of the reporting period, and the total capacity expended to date for a reporting period.~~
- ~~(l) All documentation supporting the notifications and reports required by 40 CFR 63.9 and 63.10 (Subpart A, General Provisions) and by Condition D.5.9.~~

~~D.5.10 Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 3-6-4(b)] [40 CFR 63.344(a), 63.345 and 63.347]~~

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~~The notifications and reports required in this section shall be submitted to IDEM, OAQ using the address specified in Section C - General Reporting Requirements.~~

~~(a) Notifications:~~

~~(1) A Notification of Compliance Status (NCS) is required each time that the facility becomes subject to the requirements of 40 CFR Part 63 Subpart N.~~

~~(A) The NCS shall be submitted to IDEM, OAQ, and shall list, for each tank, the information identified in 40 CFR 63.347(e)(2).~~

~~(B) The NCS for tanks 1 and 2 shall be submitted to IDEM, OAQ no later than forty five (45) days following completion of the compliance demonstration pursuant to Section C - Performance Testing.~~

~~(2) Notification of Construction or Reconstruction~~

~~Pursuant to 40 CFR 63.345(b)(1), the Permittee may not construct a new tank subject to 40 CFR 63, Subpart N (including non-affected tanks defined in 40 CFR 63.344(e)) without submitting a Notification of Construction or Reconstruction (NCR) to IDEM, OAQ. In addition, the Permittee may not change, modify, or reconstruct the electrolytic chrome dip tanks without submitting a Notification of Construction or Reconstruction (NCR) to IDEM, OAQ.~~

~~(A) The NCR shall contain the information identified in 40 CFR 63.345(b)(2) and (3).~~

~~(B) A change, modification, or reconstruction of this facility includes any change in the air pollution control techniques, the addition of add-on control devices, or the construction of duct work for the purpose of controlling both existing tanks and non-affected facilities by a common control technique or device [i.e., the addition of duct work to the CMP system].~~

~~(C) A complete application to construct new chromium electroplating or chromium anodizing tanks serves as this notification. Likewise, the complete application to modify or reconstruct the electrolytic chrome dip tank serves as this notification.~~

~~(D) Pursuant to 326 IAC 2-1.1-2(a), permission must be received from IDEM, OAQ before construction, modification, or reconstruction may commence.~~

~~(b) Performance Test Results~~

~~The Permittee shall document results from any future performance tests in a complete test report that contains the information required in 40 CFR 63.344(a).~~

~~The Permittee shall submit reports of performance test results as part of the Notification of Compliance Status, described in 40 CFR 63.347(e), no later than forty-five (45) days following the completion of the performance test.~~

~~(c) Ongoing Compliance Status Report~~

~~The Permittee shall prepare summary reports to document the ongoing compliance status of the electrolytic chrome dip tanks using the Ongoing Compliance Status Report form provided with this permit. This report shall contain the information specified in 40 CFR 63.347(g)(3).~~

~~Because tank RRS is located at a site that is an area source of hazardous air pollutants (HAPs), the Ongoing Compliance Status Report shall be retained on-site and made available to IDEM, OAQ upon request.~~

~~(1) The Ongoing Compliance Status Report shall be completed according to the following schedule except as provided in paragraphs (c)(2).~~

~~(A) The first report shall cover the period from the issuance date of this permit to December 31 of the year in which the permit is issued.~~

~~(B) Following the first year of reporting, the report shall be completed on a calendar year basis with the reporting period covering from January 1 to December 31.~~

~~(2) If both of the following conditions are met, semiannual reports shall be prepared and submitted to IDEM, OAQ:~~

~~(A) The total duration of excess emissions [as indicated by the monitoring data collected by the Permittee in accordance with 40 CFR 63.343(c)] is one percent (1%) or greater of the total operating time as defined in Condition D.5.7(b) for the reporting period; and~~

~~(B) The total duration of malfunctions of the add-on air pollution control device and monitoring equipment is five percent (5%) or greater of the total operating time as defined in Condition D.5.7(b).~~

~~Once the Permittee reports an exceedance as defined above, Ongoing Compliance Status Reports shall be submitted semiannually until a request to reduce reporting frequency in accordance with 40 CFR 63.347(g)(2) is approved.~~

~~(3) IDEM, OAQ may determine on a case-by-case basis that the summary report shall be completed more frequently and submitted, or that the report required of (c)(2) above shall be submitted instead of being retained on-site, if these measures are necessary to accurately assess the compliance status of the source.~~

SECTION D.6

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(145)]:

(g) Ancillary Equipment, as follows;

(1) Hydrogen batch annealing **operations, constructed in 1999 and 2000, with emissions with fifteen (15) natural gas-fired furnaces with low-NOx burners rated at 6.75 MMBtu/hr exhausting**

- through the roof vent system in building 500, **including**;
- (A) **Fifteen (15) natural gas-fired furnaces with low NOx burners, identified as hydrogen batch annealing furnaces Nos. 1-15, each with a maximum heat input capacity of 6.75 MMBtu/hr.;**
  - (B) **Three (3) natural gas-fired furnaces with low NOx burners, identified as hydrogen batch annealing furnaces Nos. 16-18, permitted in 2011, each with a maximum heat input capacity of 6.75 MMBtu/hr.**
- (2) \* \* \*
- (3) \* \* \*
- (4) Storage tanks for HCl acid, nitric acid, and HF (Hydrofluoric) acid exhausting through a fume scrubber to Stack S04 consisting of:
- (A) \* \* \*
  - (B) \* \* \*
  - (C) \* \* \*
  - (D) Three (3) HCL/ra acid tanks, each with a capacity of **240,000** gallons, or **6120,000** gallons combined; and
  - (E) Two (2) CPL waste acid tanks, each with a capacity of **240,000** gallons, or **480,000** gallons combined.
- \* \* \*

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

D.6.1 State Construction and Operating Permit: Construction Permit [326 IAC 2-1.1]

\* \* \*

D.6.2 Particulate Matter (PM and PM10) Best Available Control Technology (BACT) [326 IAC 2-2-3]

- (a) Pursuant to Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 34, and pursuant to 326 IAC 2-2-3 (~~Best Available Control Technology~~ **Review Requirements**), the mist from the two (2) non-contact cooling towers shall be controlled by drift eliminators and exhausted to the atmosphere. The drift losses from each of the cooling towers shall not exceed 0.005% of cooling water.
- (b) Pursuant to 326 IAC 2-2-3 (~~Best Available Control Technology~~ **Review Requirements**), Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 35, the storage tanks for CPL HCl, nitric acid, and HF shall be controlled by a fume scrubber system. The outlet grain loading from the scrubber shall not exceed 0.0066 grains per dscf. The particulate matter emissions from Stack S04 shall not exceed 0.0967 pounds per hour.
- (c) **Pursuant to PSD/SSM No. 147-28771-00041 and 326 IAC 2-2-3 (Control Technology Review Requirements), the Best Available Control Technology for PM for hydrogen batch annealing furnaces Nos. 16-18 shall be as follows:**
  - (1) **PM emissions shall be controlled by good combustion practices.**
  - (2) **PM emissions shall be less than 0.0019 lb/MMBtu and 0.013 lb/hr each.**
- (d) **Pursuant to PSD/SSM No. 147-28771-00041 and 326 IAC 2-2-3 (Control Technology Review Requirements), the Best Available Control Technology for PM10 for hydrogen batch annealing furnaces Nos. 16-18 shall be as follows:**

- (1) **PM10 emissions shall be controlled by good combustion practices.**
- (2) **PM10 emissions shall be less than 0.0076 lb/MMBtu and 0.051 lb/hr each.**

**D.6.3 Nitrogen Oxides (NOx) Best Available Control Technology (BACT) [326 IAC 2-2-3]**

Pursuant to Construction Permit 147-6713-00041, issued February 13, 1997, **PSD/SSM No. 147-28771-00041**, ~~operation condition 26, and pursuant to 326 IAC 2-2-3 (Best Available Control Technology Review Requirements)~~, the **Best Available Control Technology for NOx for hydrogen batch annealing furnaces Nos. 1-18 shall be as follows:**

- (a) **NOx emissions shall be controlled by low NOx burners.**
- (b) **NOx emissions shall be less than 0.1 lb/MMBtu each.**
- (c) **NOx emission shall be less than 9.45 lb/hr total for hydrogen batch annealing furnaces Nos. 1-18.**  
~~outlet NOx loading from the fifteen (15) 6.75 MMBtu per hour hydrogen batch annealing furnaces shall not exceed 0.1 pounds per MMBtu. The nitrogen oxide emissions shall not exceed 9.45 pounds per hour.~~

**D.6.4 Carbon Monoxide (CO) and Volatile Organic Compounds (VOC) Best Available Control Technology (BACT) [326 IAC 2-2-3]**

Pursuant to PSD/SSM No. 147-28771-00041 and 326 IAC 2-2-3 (Control Technology Review Requirements), the **Best Available Control Technology for CO and VOC for the hydrogen batch annealing furnaces Nos. 16-18 shall be as follows:**

- (a) **CO and VOC emissions shall be controlled by good combustion practices.**
- (b) **CO emissions shall be less than 0.084 lb/MMBtu and 0.57 lb/hr each.**
- (c) **VOC emissions shall be less than 0.0055 lb/MMBtu and 0.037 lb/hr each.**

**Compliance Determination Requirements**

**D.6.45 Nitrogen Oxides (NOx) Control [326 IAC 2-2]**

**In order to ensure compliance with Condition D.6.3, the eighteen (18) hydrogen batch annealing furnaces shall combust only natural gas and the low NOx burners shall be in operation at all times that the hydrogen batch annealing furnaces are in operation.** Pursuant to Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 26, and pursuant to 326 IAC 2-2-3 (Best Available Control Technology), ~~the fifteen (15) 6.75 MMBtu per hour hydrogen batch annealing furnaces shall use only natural gas and shall be equipped with low NOx burners.~~

**D.6.6 Particulate Control**

- (a) **In order to ensure compliance with Condition D.6.2, the fume scrubber system (S04) shall be in operation and control emissions from the HCl, nitric acid, and HF storage tanks at all times the tanks are in operation.**
- (b) **In the event that fume scrubber failure has been observed:**

**Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emission unit shall be shut down no later than the completion of the processing of the material in the line or emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).**

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

**D.6.75 Parametric Monitoring for Scrubber**

- (a) The Permittee shall record the pressure drop range, and the scrubbing liquid flow rate of scrubber S04 at least once per day when the process is in operation. The process operation occurs each time material is being added to or taken from the tanks controlled by scrubber S04. When for any one reading, the pressure drop range across the scrubber is outside the range of 0.4 to 4.0 inches, or the scrubbing liquor is below the minimum flow rate of 5 gallons per minute, ~~or until a new range is as established during the latest stack test, the Permittee shall take reasonable response steps. in accordance with Section C- Response to Excursions or Exceedances~~ **contains the Permittee's obligation with regard to the response steps required by this condition.** A reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps ~~in accordance with Section C - Response to Excursions or Exceedances,~~ shall be considered a deviation from this permit.
- (b) The instruments used for determining the pressure drop, and scrubbing liquid flow rate at the inlet of the control device shall be subject to approval by IDEM, OAQ, and shall be calibrated **or replaced** at least once every six (6) months.

~~D.6.6 Scrubber Failure~~

~~In the event that failure of a scrubber (S04) has been observed, if operations will continue for ten (10) days or more after the failure is observed before the failed system will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed system will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.~~

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

**D.6.78 Record Keeping**

- (a) ~~Pursuant to 326 IAC 12 and 40 CFR Part 60.110b, Subpart Kb (Standards of Performance for Storage Vessels for Petroleum Liquids), the owner or operator of all storage vessels shall keep readily accessible records of the tank dimensions and tank capacity.~~
- (ba) To document **the compliance status** with Condition D.6.57, the Permittee shall maintain ~~once per day~~ **daily** records of the pressure drop range across the scrubber, and the flow rate of the scrubbing liquor. **The Permittee shall include in its daily record when a pressure drop and/or flow rate reading is not taken and the reason for the lack of reading (e.g., the process did not operate that day).**
- (eb) ~~All records shall be maintained in accordance with Section C - General Record Keeping Requirements~~ **contains the Permittee's obligation with regard to the records required by this condition.**, of this permit. ~~Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.~~

SECTION D.7

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(154)]:  * * *
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Emission Limitations and Standards [326 IAC 2-7-5(1)]

**D.7.1 Volatile Organic Compounds (VOC) Best Available Control Technology (BACT) [326 IAC 2-2]**

\* \* \*

D.7.2 Volatile Organic Compounds (VOC) Best Available Control Technology (BACT) [326 IAC 2-2]

\*\*\*

D.7.3 Surface Coating Emission Limitations [326 IAC 8-2-1]

\*\*\*

Compliance Determination Requirements

D.7.4 VOC and HAPs

**Compliance with the VOC contents contained in Conditions D.7.1, D.7.2, and D.7.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.**

~~Material Safety and Data Sheets shall be kept on site by the Permittee for the various oils to show compliance with Conditions D.7.1, D.7.2 and 7.3.~~

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

D.7.5 Record Keeping Requirements

(a) **To document the compliance status with Conditions D.7.1, D.7.2, and D.7.3, the Permittee shall maintain records in accordance with (1) through (2) below. Records maintained for (1) through (2) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.7.1, D.7.2, and D.7.3. Records necessary to demonstrate the compliance status shall be available within 30 days of the end of each compliance period.**

(1) **The VOC content of each coating material used.**

(2) **The amount of coating material and solvent less water used on a monthly basis. Records may include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.**

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

~~All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.~~

SECTION D.8

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(145)]:

\*\*\*

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

D.8.1 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

\*\*\*

D.8.2 Nitrogen Oxides (NOx) Best Available Control Technology (BACT) [326 IAC 2-2]

\*\*\*

D.8.3 Particulate Matter (PM), Carbon Monoxide (CO), and Volatile Organic Compounds (VOC) Best Available Control Technology (BACT) [326 IAC 2-2]

\*\*\*

Compliance Determination Requirements

D.8.4 Particulate Matter

In order to ~~ensure demonstrate~~ compliance with ~~e~~Condition D.8.1, the boilers shall only combust

natural gas as fuel.

#### D.8.5 Nitrogen Oxides

**In order to ensure compliance with Condition D.8.2,** the ultra low-NOx burners for each boiler shall be operating at all times the boilers are in operation.

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

#### D.8.6 Record Keeping Requirements

- (a) **To document the compliance status with Condition D.8.2 and D.8.3, the Permittee shall keep records of the type and amount of fuel fired in each boiler.** Pursuant to Construction Permit 147-6713-00041, issued February 13, 1997, operation condition 32, 326 IAC 2-2 (PSD), 326 IAC 12, and 40 CFR Part 60.40c, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating units), the natural gas usage of the four (4) 76.0 MMBtu per hour package boilers shall be recorded and maintained as required in NSPS 60.48c(g).
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period. **contains the Permittee's obligation with regard to the records required by this condition.**

#### D.8.7 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Condition D.8.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

### SECTION D.9

#### FACILITY OPERATION CONDITIONS - Insignificant Activities

Air Liquide Industrial, U.S.L.P.

Facility Description [326 IAC 2-7-5(154)]: This industrial gas production plant consists of the following:

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### SECTION D.10

#### FACILITY OPERATION CONDITIONS- Insignificant Activities

Precision Strip, Inc.

Facility Description [326 IAC 2-7-5(154)]: A steel coil slitting operation consisting of:

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

#### D.10.1 Surface Coating Emission Limitations [326 IAC 8-2-44]

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#### D.10.2 Usage Limit

\* \* \*

### D.10.3 VOC

\* \* \*

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

### D.10.4 VOCs

Compliance with the VOC content and usage contained in Conditions D.10.1 and D.10.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

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

### D.10.45 Record Keeping Requirements

- (a) To document the compliance status with Conditions D.10.1, D.10.2, and D.10.3, the Permittee shall maintain records in accordance with (1) through (2) below. Records maintained for (1) through (2) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.10.1, D.10.2, and D.10.3. Records necessary to demonstrate the compliance status shall be available within 30 days of the end of each compliance period.
- (1) The VOC content of each coating material used.
  - (2) The amount of coating material and solvent less water used on a monthly basis. Records may include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
- (ab) To document the compliance status with Condition D.10.3, Precision Strip, Inc., shall keep production records for the back-up electrostatic oiler **related to work performed for AK Steel Corporation, Rockport Works** ~~on site and available at all times to show compliance with condition D.10.1, D.10.2 and D.10.3.~~
- (bc) ~~All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.~~ **contains the Permittee's obligation with regard to the records required by this condition.**

## E Sections of the Permit

New E Sections have been added to the permit to address the applicable provisions of 40 CFR 63, Subpart N (Section E.1), 40 CFR 60, Subpart Kb (Section E.2), and 40 CFR 60, Subpart Dc (Section E.3).

The permit has been revised as follows:

### SECTION E.1

### EMISSIONS UNIT OPERATION CONDITIONS

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

- (f) A Roll Repair Shop consisting of:

- (1) Two (2) electrolytic chrome dip tanks, identified as 1 East and 1 West constructed in 1998, rated at 36 tons per hour steel rolls each, or 5.5 gallons per hour chromium solution, with both exhausting through a mesh pad mist elimination system to Stack S15.

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

**National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks - 40 CFR Part 63, Subpart N [326 IAC 2-7-5(1)]**

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

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, as specified in Table 1 of 40 CFR 63, Subpart N, in accordance with the schedule in 40 CFR 63, Subpart N.

**E.1.2 Chromium Electroplating NESHAP [40 CFR Part 63, Subpart N][326 IAC 20-8]**

The Permittee which engages in a hard chromium electroplating operation shall comply with the following provisions of 40 CFR 63, Subpart N (included as Attachment A of the permit), which are incorporated by reference as 326 IAC 20-8:

- (1) 40 CFR 63.340(a)
- (2) 40 CFR 63.340(b)
- (3) 40 CFR 63.340(c)
- (4) 40 CFR 63.340(e)
- (5) 40 CFR 63.341
- (6) 40 CFR 63.342(a)
- (7) 40 CFR 63.342(b)
- (8) 40 CFR 63.342(c)
- (9) 40 CFR 63.342(f)
- (10) 40 CFR 63.342(g)
- (11) Table 1 to 40 CFR 63.342
- (12) 40 CFR 63.343(a)(2)
- (13) 40 CFR 63.343(a)(5)
- (14) 40 CFR 63.343(a)(6)
- (15) 40 CFR 63.343(b)(1)
- (16) 40 CFR 63.343(b)(2)
- (17) 40 CFR 63.343(c)(1)
- (18) 40 CFR 63.344(a)
- (19) 40 CFR 63.344(c)
- (20) 40 CFR 63.344(d)
- (21) 40 CFR 63.346(a)
- (22) 40 CFR 63.346(b)(1)
- (23) 40 CFR 63.346(b)(2)
- (24) 40 CFR 63.346(b)(3)
- (25) 40 CFR 63.346(b)(4)
- (26) 40 CFR 63.346(b)(5)
- (27) 40 CFR 63.346(b)(6)
- (28) 40 CFR 63.346(b)(7)
- (29) 40 CFR 63.346(b)(8)
- (30) 40 CFR 63.346(b)(9)
- (31) 40 CFR 63.346(b)(10)
- (32) 40 CFR 63.346(b)(11)
- (33) 40 CFR 63.346(b)(12)

- (34) 40 CFR 63.346(b)(13)
- (35) 40 CFR 63.346(b)(16)
- (36) 40 CFR 63.346(c)
- (37) 40 CFR 63.347(a)
- (38) 40 CFR 63.347(b)
- (39) 40 CFR 63.347(c)
- (40) 40 CFR 63.347(d)
- (41) 40 CFR 63.347(e)
- (42) 40 CFR 63.347(f)
- (43) 40 CFR 63.347(h)
- (44) 40 CFR 63.348
- (41) 40 CFR 63, Subpart N, Table 1

## SECTION E.2

## EMISSIONS UNIT OPERATION CONDITIONS

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

#### (h) Ancillary Equipment, as follows;

- (4) Storage tanks for HCl, nitric acid, and HF exhausting through a fume scrubber to Stack S04 consisting of:
  - (A) One (1) HF acid tank with a capacity of 20,000 gallons;
  - (B) One (1) nitric acid tank with a capacity of 20,000 gallons;
  - (C) Three (3) waste acid tanks, each with a capacity of 40,000 gallons, or 120,000 gallons combined;
  - (D) Three (3) HCl/ra acid tanks, each with a capacity of 40,000 gallons, or 120,000 gallons combined; and
  - (E) Two (2) CPL waste acid tanks, each with a capacity of 40,000 gallons, or 80,000 gallons combined.
- (5) Miscellaneous storage tanks at the continuous cold mill (CCM) operation not to exceed an overall capacity of 353,000 gallons, consisting of:
  - (E) Two (2) Emulsion tanks, No.1 and No.2, each with a capacity of 88,000 gallons, or 176,000 gallons combined; and
  - (F) Two (2) Emulsion tanks, No.3 and No.4, each with a capacity of 44,000 gallons, or 88,000 gallons combined.

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

**New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 - 40 CFR Part 60 Subpart Kb [326 IAC 2-7-5(1)]**

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

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the ten (10) storage tanks for HCl, nitric acid, and HF and four (4) emulsion tanks, identified as No. 1, No. 2, No. 3 and No. 4, respectively, at the

**continuous cold mill (CCM) except when otherwise specified in 40 CFR Part 60, Subpart Kb.**

**E.2.2 New Source Performance Standards for Volatile Organic Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984: Requirements [40 CFR Part 60, Subpart Kb] [326 IAC 12]**

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Kb (New Source Performance Standards for Volatile Organic Storage Vessels) (included as Attachment B of this permit), which are incorporated by reference as 326 IAC 12, for the ten (10) storage tanks for HCl, nitric acid, and HF and four (4) emulsion tanks, identified as No. 1, No. 2, No. 3 and No. 4, at the continuous cold mill (CCM) which are incorporated by reference as 326 IAC 12:

- (1) 40 CFR 60.110b(a)
- (2) 40 CFR 60.111b
- (3) 40 CFR 60.116b(a)
- (4) 40 CFR 60.116b(b)
- (5) 40 CFR 60.116b(e)(3)
- (6) 40 CFR 60.117b

**SECTION E.3**

**EMISSIONS UNIT OPERATION CONDITIONS**

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

**(i) Process Boilers consisting of:**

- (1) **North Boilers:** Two (2) natural gas-fired boilers with ultra low-NOx burners, constructed in 1998, each rated at 76.0 MMBtu/hr heat input, exhausting to Stack S03.
- (2) **South Boilers:** Two (2) natural gas-fired boilers with ultra low-NOx burners, constructed in 1998, each rated at 76.0 MMBtu/hr heat input, exhausting to Stack S20.

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

**New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units - 40 CFR Part 60, Subpart Dc [326 IAC 12]**

**E.3.1 General Provisions Relating to NSPS, Subpart Dc [326 IAC 12-1] [40 CFR Part 60, Subpart A]**

The provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the two (2) north boilers and two (2) south boilers, except when otherwise specified in 40 CFR 60, Subpart Dc.

**E.3.2 New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units [40 CFR Part 60, Subpart Dc] [326 IAC 12]**

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Dc (New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units) (included as Attachment C of this permit), which are incorporated by reference as 326 IAC 12:

- (1) 40 CFR 60.40c (a)
- (2) 40 CFR 60.41c

- (3) 40 CFR 60.48c (a)(1)
- (4) 40 CFR 60.48c (g)(1)
- (5) 40 CFR 60.48c (i)

### **Changes to the Forms of the Permit**

The following is a summary of the changes that 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.
- (c) The Quarterly Deviation and Compliance Monitoring Report has been revised to clarify the interaction of the Quarterly Deviation and Compliance Monitoring Report and the Emergency Provisions.

### **Conclusion and Recommendation**

The construction and operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 PSD/Significant Source Modification No. 147-28771-00041 and Significant Permit Modification No. 147-28980-00041, respectively. The staff recommend to the Commissioner that this Part 70 PSD/Significant Source Modification and Significant Permit Modification be approved.

### **IDEM Contact**

- (a) Questions regarding this proposed permit can be directed to Laura Spriggs at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-5693 or toll free at 1-800-451-6027 extension 3-5693.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: [www.idem.in.gov](http://www.idem.in.gov)

**Appendix A: Emissions Calculations**  
**Hydrogen Batch Annealing Furnaces Natural Gas Combustion (< 100 MMBtu/hr)**

Company Name: AK Steel Corporation, Rockport Works  
 Address City IN Zip: 6500 US 31 N, Rockport, IN 47635  
 SSM No.: 147-28771-00041  
 SPM No.: 147-28980-00041  
 Reviewer: Laura Spriggs

			Criteria Pollutants					GHGs						
			PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO	CO2	N2O	CH4	GHG Mass-Based	CO2e
Emission Factor in lb/MMCF			1.9	7.6	7.6	0.6	100.0	5.5	84.0	120000	0.64	2.3		
							**see below							
Emission Unit	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)	Potential Emissions (tons/yr)											
Batch Annealing Furnace	6.75	57.971	0.055	0.220	0.220	0.017	2.899	0.159	2.435	3478.24	0.02	0.07	3478.32	3485.39
Batch Annealing Furnace	6.75	57.971	0.055	0.220	0.220	0.017	2.899	0.159	2.435	3478.24	0.02	0.07	3478.32	3485.39
Batch Annealing Furnace	6.75	57.971	0.055	0.220	0.220	0.017	2.899	0.159	2.435	3478.24	0.02	0.07	3478.32	3485.39
<b>Total</b>			<b>0.17</b>	<b>0.66</b>	<b>0.66</b>	<b>0.05</b>	<b>8.70</b>	<b>0.48</b>	<b>7.30</b>	<b>10434.71</b>	<b>0.06</b>	<b>0.20</b>	<b>10434.96</b>	<b>10456.16</b>

Emission Factors are from AP-42, Tables 1.4-1 and 1.4-2.

\*PM emission factor is filterable PM only. PM10 and PM2.5 emission factors are filterable and condensable particulate combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

			HAPs - Organics					HAPs - Metals					Total HAPs
			Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Lead	Cadmium	Chromium	Manganese	Nickel	
Emission Factor in lb/MMCF			2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	1.8880
Emission Unit	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)	Potential Emissions (tons/yr)										
Batch Annealing Furnace	6.75	57.971	6.1E-05	3.5E-05	2.2E-03	5.2E-02	9.9E-05	1.4E-05	3.2E-05	4.1E-05	1.1E-05	6.1E-05	5.5E-02
Batch Annealing Furnace	6.75	57.971	6.1E-05	3.5E-05	2.2E-03	5.2E-02	9.9E-05	1.4E-05	3.2E-05	4.1E-05	1.1E-05	6.1E-05	5.5E-02
Batch Annealing Furnace	6.75	57.971	6.1E-05	3.5E-05	2.2E-03	5.2E-02	9.9E-05	1.4E-05	3.2E-05	4.1E-05	1.1E-05	6.1E-05	5.5E-02
<b>Total</b>			<b>1.8E-04</b>	<b>1.0E-04</b>	<b>6.5E-03</b>	<b>1.6E-01</b>	<b>3.0E-04</b>	<b>4.3E-05</b>	<b>9.6E-05</b>	<b>1.2E-04</b>	<b>3.3E-05</b>	<b>1.8E-04</b>	<b>1.6E-01</b>

Emission Factors are from AP-42, Tables 1.4-3 and 1.4-4.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4. Total HAPs is the sum of all HAPs listed in AP-42.

**Methodology**

Heating Value of Natural Gas is assumed to be 1020 MMBtu/MMCF

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) \* 8,760 hrs/yr \* 1 MMCF/1,020 MMBtu

Potential Emission (tons/yr) = Throughput (MMCF/yr) \* Emission Factor (lb/MMCF) \* (1 ton/2,000 lb)

**GHGs:**

GHG Mass-Based (ton/yr) = CO2 (ton/yr) + N2O (ton/yr) + CH4 (ton/yr)

$$CO2e = \sum_{i=1}^n GHG_i \bullet GWP_i$$

Where: CO2e = carbon dioxide equivalent (ton/yr)  
 GHGi = mass emission rate of each greenhouse gas (ton/yr)  
 GWPi = global warming potential for each greenhouse gas  
 n = number of greenhouse gases emitted  
 GWPs from 40 CFR 98, Subpart A, Table A-1: 1 for CO2, 21 for CH4, 310 for N2O

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

Appendix B to the Technical Support Document

PSD BACT Analysis  
for Three (3) Hydrogen Batch Annealing Furnaces

**Source Background and Description**

Source Name:	AK Steel Corporation, Rockport Works
Source Location:	6500 N. U.S. 231, Rockport, Indiana 47635
County:	Spencer
SIC Code:	3312
Operation Permit No.:	T147-11043-00041
Operation Permit Issuance Date:	September 1, 2006
PSD/Significant Source Modification No.:	147-28771-00041
Significant Permit Modification No.:	147-28980-00041
Permit Reviewer:	Laura Spriggs

**Proposed Modification**

On December 21, 2009, the Office of Air Quality (OAQ) received an application from AK Steel Corporation, Rockport Works, located at 6500 N. U.S. 231, Rockport, Indiana, in Spencer County, to add three (3) batch annealing furnaces to its Part 70 Operating Permit, T147-11043-00041. AK Steel Corporation was issued PSD Construction Permit No. 147-6713-00041 on February 13, 1997 for the construction of a steel coil finishing operation. The PSD construction permit authorized the construction of fifteen (15) batch annealing furnaces. Eight (8) hydrogen batch annealing furnaces were installed during the first phase of the project and then ten (10) furnaces were installed during the second phase, which resulted in three (3) additional unpermitted furnaces. Since these three (3) furnaces were part of the original construction project, in order to incorporate them into the Part 70 Operating Permit (T147-11043-00041), the furnaces must be evaluated for PSD BACT for each of the regulated air pollutants that triggered BACT analysis in the original PSD construction project as if they were being constructed today. The pollutants that were reviewed for PSD BACT as part of 147-6713-00041 include PM, VOC, CO, and NO<sub>x</sub>. Additionally, PM<sub>10</sub> is being evaluated since it would have been regulated at the time that the additional furnaces were installed. However, PM<sub>2.5</sub> is not being included as part of the BACT analyses since it was not regulated as an air pollutant separate from PM<sub>10</sub> in 2000.

The following is a description of the emission units constructed and operated without a permit and receiving new source review approval:

- (a) One (1) hydrogen batch annealing furnace, installed in February 1999, permitted in 2011, with a maximum heat input capacity of 6.75 MMBtu/hr, using low NO<sub>x</sub> burners as control, and exhausting through the roof vent system in building 500.
- (b) Two (2) hydrogen batch annealing furnaces, installed in February 2000, permitted in 2011, with a maximum heat input capacity of 6.75 MMBtu/hr each, using low NO<sub>x</sub> burners as control, and exhausting through the roof vent system in building 500.

## Requirement for Best Available Control Technology (BACT)

This proposed modification to Part 70 Operating Permit No. T147-11043-00041, issued September 1, 2006 is subject to PSD BACT review for PM, PM10, VOC, CO, and NOx for the three (3) unpermitted hydrogen batch annealing furnaces because they should have been included in the BACT analysis performed with the original PSD Construction Permit No. 147-6713-00041.

## BACT Definition and Applicability

BACT is a mass emission limitation based on the maximum degree of pollution reduction of emissions, which is achievable on a case-by-case basis. A BACT analysis takes into account the energy, environmental, and economic impacts on the source. These reductions may be determined through the application of available control techniques, process design, work practices, and operational limitations. Such reductions are necessary to demonstrate that the emissions remaining after application of BACT will not cause or contribute to air pollution, thereby protecting public health and the environment.

Federal guidance on BACT requires an evaluation that follows a “top down” process. In this approach, the applicant identifies the best-controlled similar source on the basis of controls required by the regulation or the permit, or the controls achieved in practice. The highest level of the control is then evaluated for technical feasibility.

The five (5) basic steps of a top-down BACT analysis are listed below:

### *Step 1: Identify Potential Control Technologies*

The first step is to identify potentially “available” control options for each emission unit and for each pollutant under review. Available options should consist of a comprehensive list of those technologies with a potentially practical application to the emissions unit in question. The list should include lowest achievable emission rate (LAER) technologies, innovative technologies, and controls applied to similar source categories. There is no requirement in the State or Federal regulations to require innovative control to be used as BACT.

### *Step 2: Eliminate Technically Infeasible Options*

The second step is to eliminate technically infeasible options from further consideration. To be considered feasible, a technology must be both available and applicable. It is important in this step that any presentation of a technical argument for eliminating a technology from further consideration be clearly documented based on physical, chemical, engineering, and source-specific factors related to safe and successful use of the controls. Innovative control means a control that has not been demonstrated in a commercial application on similar units. Innovative controls are normally given a waiver from the BACT requirements due to the uncertainty of actual control efficiency. Based on this, the OAQ will not evaluate or require any innovative controls for this BACT analysis. Only available and proven control technologies are evaluated. A control technology is considered available when there are sufficient data indicating that the technology results in a reduction in emissions of regulated pollutants.

### *Step 3: Rank the Remaining Control Technologies by Control Effectiveness*

The third step is to rank the technologies not eliminated in Step 2 in order of descending control effectiveness for each pollutant of concern. The ranked alternatives are reviewed in terms of environmental, energy, and economic impacts specific to the proposed

modification. If the analysis determines that the evaluated alternative is not appropriate as BACT due to any of the impacts, then the next most effective is evaluated. This process is repeated until a control alternative is chosen as BACT. If the highest ranked technology is proposed as BACT, it is not necessary to perform any further technical or economic evaluation, except for the environmental analyses.

*Step 4: Evaluate the Most Effective Controls and Document the Results*

The fourth step entails an evaluation of energy, environmental, and economic impacts for determining a final level of control. The evaluation begins with the most stringent control option and continues until a technology under consideration cannot be eliminated based on adverse energy, environmental, or economic impacts.

*Step 5: Select BACT*

The fifth and final step is to select as BACT the most effective of the remaining technologies under consideration for each pollutant of concern. For the technologies determined to be feasible, there may be several different limits that have been set as BACT for the same control technology. The permitting agency has to choose the most stringent limit as BACT unless the applicant demonstrates in a convincing manner why that limit is not feasible. The final BACT determination would be the technology with the most stringent corresponding limit that is economically feasible. BACT must, at a minimum, be no less stringent than the level of control required by any applicable New Source Performance Standard (NSPS) and National Emissions Standard for Hazardous Air Pollutants (NESHAP) or state regulatory standards applicable to the emission units included in the permits.

**Process Discussion and Similar Sources**

Annealing is a heat treatment process that may be used to reduce hardness, obtain a relatively near-stable microstructure, refine grain size, improve machinability, and/or facilitate cold working. Steel is heated to a certain temperature, followed by slow cooling (1). Annealing may be performed either by batch annealing or continuous annealing. In batch annealing, multiple coils of sheet are placed under a cover with a reducing atmosphere and heated for a time period that may involve days. Continuous annealing of sheet involves the rapid passage of uncoiled sheet through heating and cooling equipment on the order of minutes. In addition to the obvious differences in equipment, batch and continuous annealing have important differences in heating and cooling profiles (2). Emissions from the annealing process are a result of the fuel (natural gas) combustion.

A search of the U.S. EPA RACT/BACT/LAER Clearinghouse (RBLC) was conducted for annealing furnaces from January 2001 through September 2011. The following is a summary of the sources with annealing furnace processes and whether or not these furnaces are comparable to those at AK Steel Corporation, Rockport Works. Comparable furnaces will be those that are both batch annealing furnaces for steel and that have a relatively smaller burner size (less than 20 MMBtu/hr). Only comparable sources will be considered in the BACT analyses.

Facility: County, State	RBLC ID/Permit # (Issuance Date)	Process	Comparable Furnaces?
AK Steel Corporation, Rockport Works: Spencer, IN	Current Project	3 Hydrogen Batch Annealing Furnaces (Natural Gas: 6.75 MMBtu/hr each)	
Nucor Steel: Montgomery, IN	IN-0090/107-12143-00038 (01/19/2001)	Batch Annealing Furnace, 18 (Natural Gas: 4.8 MMBtu/hr each)	Yes
Pro Tec Coating Company: Putnam, OH	OH-0258/03-10957 (02/15/2001)	Annealing Furnace, Steel (Natural Gas: 76.8 MMBtu/hr) (continuous)	No - This is a continuous furnace.

Facility: County, State	RBLC ID/Permit # (Issuance Date)	Process	Comparable Furnaces?
The Timken Company/Faircrest Plant: Stark, OH	OH-0246/PTI 15-01339 (02/20/2003)	Annealing Furnace, Natural Gas Fired, (2) (Natural Gas: 26.5 MMBtu/hr) (not installed)	No - It is not clear whether or not these are batch or continuous furnaces, as proposed; however, they are larger burners so will not be considered comparable.
The Timken Company/Faircrest Plant: Stark, OH	OH-0246/PTI 15-01339 (02/20/2003)	Annealing Furnace (Natural Gas: 22 MMBtu/hr) (not installed)	No - It is not clear whether or not these are batch or continuous furnaces, as proposed; however, they are larger burners so will not be considered comparable.
North American Stainless: Carroll, KY	KY-0094/V-03-037 (12/01/2003)	Annealing Furnace, Emission Point 61 (Natural Gas: 114 MMBtu/hr)	No - These larger burners will not be considered comparable.
North American Stainless: Carroll, KY	KY-0094/V-03-037 (12/01/2003)	Annealing Furnaces, Emission Points, 70 and 71 (Natural Gas: 40 MMBtu/hr)	No - These larger burners will not be considered comparable.
Charter Specialty Steel - Saukville Plant: Ozaukee, WI	WI-0206/02-DCF-178 (12/19/2003)	Box Annealing Furnaces, P39, S39; P40, S40 (Natural Gas: 10.4 MMBtu/hr each)	No - These furnaces use radiant tube heating (includes a Rx generator with a flare) and operate under a nitrogen blanket as opposed to the conventional direct-fired technology.
Hoeganaes Corp.: Sumner, TN	TN-0157/955967P, 956600P, 956601P, 956 (12/31/2003)	Annealing Furnaces (Natural Gas: 8 at 80 MMBtu/hr total) (belt annealing furnaces for metal powder annealing)	No - These furnaces are for metal powder annealing.
Nucor Steel, Arkansas: Mississippi, AR	AR-0090/1139-AOP-R6 (04/03/2006)	Annealing Furnaces SN-61 (Natural Gas: 4.8 MMBtu/hr)	Yes
Alumax Secondary Aluminum Smelter: Bowie, TX	TX-0503/PSD-TX 886 and 9476 (05/15/2006)	Annealing Furnaces (8) (Natural Gas: 16-22 MMBtu/hr each)	No - This source is a secondary aluminum smelter.
Ellwood National Steel: Warren, PA	PA-0251/62-32B (08/18/2006)	ENS Annealing (Natural Gas: 30 ton/hr steel, 28 MMBtu/hr calculated)	No - These larger burners will not be considered comparable.
Ellwood Quality Steels Company: Lawrence, PA	PA-0255/37-264G (08/01/2007)	6 Annealing Furnaces (Natural Gas: Estimated at 30 MMBtu/hr each)	No - These larger burners will not be considered comparable.
ThyssenKrupp Steel and Stainless USA, LLC: Mobile, AL	AL-0230/503-0095-X001 thru X026 (08/17/2007)	Natural Gas-Fired Annealing Furnace (LA43) (Multiple Emission Points) (Natural Gas: 196.4 MMBtu/hr)	No - This is a continuous furnace.
ThyssenKrupp Steel and Stainless USA, LLC: Mobile, AL	AL-0230/503-0095-X001 thru X026 (08/17/2007)	Natural Gas-Fired Batch Annealing Furnaces (LA63, LA64) (Natural Gas: 33.4 MMBtu/hr each)	No - These larger burners will not be considered comparable.
ThyssenKrupp Steel and Stainless USA, LLC: Mobile, AL	AL-0230/503-0095-X001 thru X026 (08/17/2007)	Natural Gas-Fired Passive Annealing Furnace (LO41) (Natural Gas: 27.2 MMBtu/hr)	No - These larger burners will not be considered comparable.
ThyssenKrupp Steel and Stainless USA, LLC: Mobile, AL	AL-0230/503-0095-X001 thru X026 (08/17/2007)	Natural Gas-Fired Batch Annealing Furnace (535) (Natural Gas: 99 MMBtu/hr)	No - These larger burners will not be considered comparable.
Carpenter Tech Corp: Berks, PA	PA-0262/06-05007D (10/01/2007)	Batch Annealing Furnaces (4) (Natural Gas: Estimated to be 8-10 MMBtu/hr each)	Yes
Nucor Steel, Arkansas: Mississippi, AR	AR-0095/1139-AOP-R9 (12/12/2007)	Annealing Furnaces, SN-89 (Natural Gas: 4.8 MMBtu/hr each) (batch)	Yes
New Steel International, Inc., Haverhill: Scioto, OH	OH-0315/07-00587 (05/06/2008)	Annealing Furnace to Pickle Galvanizing Line (2) (Natural Gas: 0.06 MMSCF/hr = 61.2 MMBtu/hr) (Continuous)	No - This is a continuous furnace.

Facility: County, State	RBL ID/Permit # (Issuance Date)	Process	Comparable Furnaces?
Allegheny Ludlum Corporation - Brackenridge Facility: Allegheny, PA	PA-0274/0059-I008 (02/16/2010)	Four (4) Batch Annealing Furnaces (S-208, S-209, S-210, and S-211) (Natural Gas: 21 MMBtu/hr each)	No - These larger burners will not be considered comparable.

(1) "Heat Treating", ASM International:  
<http://www.asminternational.org/portal/site/www/SubjectGuideltem/?vgnextoid=5c3655c96bd9d210VgnVCM100000621e010aRCRD>

(2) R. Pradhan, ASM Handbook Volume 4, Heat Treating (ASM International), 1990  
<http://www.asminternational.org/portal/site/www/AsmStore/ProductDetails/?vgnextoid=b07a7e0e64e18110VgnVCM100000701e010aRCRD#details>

## BACT for Nitrogen Oxide (NO<sub>x</sub>)

The three (3) batch annealing furnaces to be evaluated for NO<sub>x</sub> BACT were installed in 1999 and 2000. Each has a heat input capacity of 6.75 MMBtu/hr and is equipped with low NO<sub>x</sub> burners designed to burn natural gas only. All emissions from these natural gas-fired emission sources are products of combustion.

### *Step 1: Identify Potential Control Technologies (NO<sub>x</sub>)*

Nitrogen oxides (NO<sub>x</sub>) are formed during the combustion process. NO<sub>x</sub> emissions include nitric oxide (NO) and nitrogen dioxide (NO<sub>2</sub>). Approximately 95 percent of the NO<sub>x</sub> formed during combustion is NO, with most of the remaining emitted as NO<sub>2</sub>. Because NO emissions tend to oxidize as NO<sub>2</sub> in the atmosphere, NO<sub>x</sub> emissions are generally expressed in units of NO<sub>2</sub> equivalent emissions. NO<sub>x</sub> is formed from the chemical reaction between nitrogen and oxygen at high temperature. NO<sub>x</sub> formation during combustion occurs in three ways:

1. Oxidation of nitrogen in the combustion air which occurs at elevated temperatures (thermal NO<sub>x</sub>);
2. A reaction of hydrocarbons and nitrogen followed by oxidation (prompt NO<sub>x</sub>); and
3. Oxidation of nitrogen chemically bound in the fuel (fuel NO<sub>x</sub>).

The general approaches to controlling NO<sub>x</sub> emissions from stationary sources include:

1. Limiting the nitrogen content of fuels combusted;
2. Add-on controls; or
3. Combustion controls

These are discussed further below.

### ***Limiting the Nitrogen Content of Fuels Combusted***

During combustion processes, fuels that contain nitrogen generate "fuel NO<sub>x</sub>" that results from the oxidation of the nitrogen contained in the fuel. Using ultra-low nitrogen fuels can result in significant decreases in NO<sub>x</sub> emissions. Natural gas can be considered a low-nitrogen fuel, as can coke. Each type of combustion source has a number of specific and important fuel characteristic requirements and not all low nitrogen fuels will meet these fuel-burning characteristics.

### ***Add-On Controls***

The following are potential add-on control devices for controlling NO<sub>x</sub> emissions:

#### Selective Catalytic Reduction (SCR)

The SCR process chemically reduces the NO<sub>x</sub> molecule into molecular nitrogen and water vapor. A nitrogen based reagent such as ammonia or urea is injected into the ductwork, downstream of the combustion unit, where the waste gas mixes with the reagent and then enters into a reactor containing a catalyst. The reagent reacts selectively with the NO<sub>x</sub> within a specific temperature range in the presence of the catalyst and oxygen to reduce the NO<sub>x</sub> to nitrogen and water. Typical industrial applications of SCR systems include stationary fossil fuel combustion units such as electrical utility boilers, industrial boilers, process heaters, gas turbines, and reciprocating internal combustion engines as well as for nitric acid plants. SCR is capable of NO<sub>x</sub> reduction efficiencies in the range of 70-90%.

The NO<sub>x</sub> reduction reaction is only effective within a given temperature range, depending on the waste gas composition and type of catalyst. Optimum temperatures range from 480-800°F. SCR systems are capable of reducing NO<sub>x</sub> in low-concentration waste streams (as low as 20 ppm). The catalyst in SCR systems offers increased NO<sub>x</sub> control over selective non-catalytic reduction systems; however, there is an increase in capital and operating costs. In addition high levels of sulfur and/or PM in the waste gas stream will increase the cost of the system due to possible early deactivation of the catalyst and fouling of downstream equipment.

#### Selective Non-Catalytic Reduction (SNCR)

Similar to the SCR process, SNCR systems also chemically reduce NO<sub>x</sub> to molecular nitrogen and water vapor. A nitrogen based reducing agent, such as ammonia or urea, is injected into the waste gas after combustion, where the reduction of NO<sub>x</sub> is optimized at a temperature range of 1600-2100°F. SNCR systems provide for NO<sub>x</sub> reductions in the range of 30-50%. Increased NO<sub>x</sub> reductions (up to 65-75%) may be achieved with SNCR applied in conjunction with combustion controls, such as low NO<sub>x</sub> burners. SNCR systems have been used on a wide range of boiler and fuel-type configurations as well as for thermal incinerators, municipal and hazardous solid waste combustion units, cement kilns, process heaters, and glass furnaces.

SNCR tends to be less effective at lower levels of uncontrolled NO<sub>x</sub>. However, these systems are better suited to waste gas streams with higher concentrations of PM than SCR systems. As with SCR systems, SNCR may lead to ammonia slip (emissions of ammonia resulting from incomplete reaction of NO<sub>x</sub> and reagent). Ammonia slip may cause corrosion of downstream components, disposal issues for fly ash, and increased plume visibility.

#### **Combustion Controls**

NO<sub>x</sub> emissions can be reduced significantly by minimizing the rate at which NO<sub>x</sub> is formed in the combustion process. This can be accomplished by manipulating the combustion process to occur under fuel rich conditions or by reducing the peak flame temperature.

NO<sub>x</sub> reduction technologies using combustion controls include the following approaches:

#### Low Excess Air (LEA)

Typically, the simplest operational adjustments rely on the reduction of excess oxygen used in combustion. LEA reduces oxygen availability, thereby decreasing oxidation of nitrogen to NO<sub>x</sub>. This is an easy modification, but provides for low NO<sub>x</sub> reductions of only 5-10%. The presence of extra air supports complete combustion at all normal firing rates and conditions and provides an operational safety margin that prevents inadvertent operation at fuel-rich conditions reducing the formation of combustible vapor mixtures and the possibility of a firebox explosion.

The NO<sub>x</sub> creation rate typically peaks at excess oxygen levels of 5-7% where the combination of high combustion temperatures and the higher oxygen concentrations act together. At both lower and higher air/fuel ratios, NO<sub>x</sub> production falls off – due to lower flame temperature at high excess air levels and lower oxygen at low excess air levels. Low excess air is achieved through changes in operating procedures, system controls or both. However, excessive reduction in excess air can be accompanied by significant increases in CO and a loss in combustion efficiency.

#### Off-Stoichiometric Firing (OSF) (consists of Burners Out of Service (BOOS) and Over Fire Air (OFA))

OSF allows for staged combustion. In the primary stage, a fuel-rich environment encourages more complete combustion of the fuel, limiting the amount of fuel NO<sub>x</sub>. In the secondary stage, increased air allows for combustion to complete, but the lower temperature, reduces thermal NO<sub>x</sub> formation. The deficiency of oxygen in the first zone and the low temperatures in the second zone both contribute to a reduction in NO<sub>x</sub> production. Staged combustion can result in NO<sub>x</sub> reductions of up to 60% for natural gas.

Staged combustion can be accomplished external to the burner body by separate introduction of air. External air staging techniques commonly used for larger boilers include:

- **Burners-out-of-service (BOOS)** which is a staged combustion technique typically used for large boilers. Introducing additional gas through operational burners at the lower furnace zone to create fuel rich conditions controls NO<sub>x</sub>. Additional air is supplied through registers of non-operating burners above the lower zone to complete combustion.
- **Over-fire-air (OFA)** which typically involves the injection of secondary air into the furnace through OFA ports above the top burner level, coupled with a reduction in primary airflow to the burners. The fuel rich air-fuel mixture is fed to the normal burners reducing flame temperature and oxygen concentration.

Although operation with BOOS can measurably reduce NO<sub>x</sub>, the operating performance of the boiler can be somewhat degraded because of the need to increase excess air in order to control CO, hydrocarbon, and smoke emissions. Adjustments to the airflow controls, such as burner registers, may be required to achieve the desired burner stoichiometry without increasing these emissions. Also, operation with BOOS usually requires that the unit be derated unless modification to the fuel delivery system is made. Generally, OFA is applicable only to large furnaces with sufficient volume above the burners to allow complete combustion and steam temperature control.

#### Low NO<sub>x</sub> Burners (LNB)

LNBs provide a steady flame for internal staged combustion. Internal staged combustion achieves lower NO<sub>x</sub> emissions by staging the injection of either air or fuel in the near burner region. Staged combustion burners may be further classified as either staged air burners or staged fuel burners. The division of combustion air reduces the oxygen concentration in the primary burner combustion zone, lowering the amount of NO<sub>x</sub> formed and increasing the amount of NO<sub>x</sub> reducing agents. Secondary and tertiary air completes the combustion downstream of the primary zone, lowering the peak temperature and reducing thermal NO<sub>x</sub> formation.

Due to the staging effect of staged combustion air (SCA) burners, flame lengths tend to be longer than those of conventional burners. This may be of particular concern for packaged units because there is the possibility that flame impingement will occur on the furnace walls, resulting in tube failure and corrosion. Additionally, staged air burners are often wider and longer than conventional burners, possibly requiring modifications to existing waterwalls and windboxes.

#### Ultra Low NO<sub>x</sub> Burners (ULNB)

These burners incorporate a variety of techniques including flue gas recirculation, steam injection, or a combination of techniques to increase NO<sub>x</sub> reductions.

#### Flue Gas Recirculation (FGR)

FGR involves recycling a portion of the combustion gases from the stack to the furnace windbox. Introducing some of the flue gas back into the combustion air can reduce peak flame temperatures. The incoming air is diluted and the oxygen concentration in the combustion zone is reduced. During combustion, the recirculated flue gases also absorb some of the heat and thereby reduce the peak combustion temperatures. In order to retrofit a furnace with FGR, the major additional equipment needed are a gas recirculation fan, dampers and ducting.

FGR technology can be classified into two types:

- **External flue gas recirculation** utilizes an external fan to recirculate the flue gases back into the flame. External piping routes the exhaust gases from the stack to the burner. A valve controls the recirculation rate, based on boiler input.

- **Induced flue gas recirculation** utilizes the combustion air fan to recirculate the flue gases back into the flame. A portion of the flue gases are routed by duct work or internally to the combustion air fan, where they are premixed with the combustion air and introduced into the flame through the burner. New designs of induced FGR that utilize an integral FGR design are becoming popular because of their uncomplicated design and reliability.

Increased FGR can increase the flame size which may cause impingement on heat transfer surfaces thus limiting firing rate. The energy efficiency may be negatively impacted due to reduced heat transfer as a result of lower flame temperatures. Usually, thermal efficiency reductions resulting from FGR are limited to around 1% or lower. Combustion sources are usually not operated with more than 20 percent FGR due to flame stability considerations. Overall NO<sub>x</sub> reductions are typically in the 40-70% range.

#### Water/Steam Injection

By injecting water or steam into the burner flame, flame temperatures are reduced, thereby lowering thermal NO<sub>x</sub> formation and overall NO<sub>x</sub> levels. Water or steam injection can reduce NO<sub>x</sub> up to 75% (when firing natural gas) and can result in lower reductions when firing oils. There is a practical limit to the amount of water or steam that can be injected into the flame before condensation problems are experienced.

Under normal operating conditions, water/steam injection can result in a 3-10% burner efficiency loss. Water or steam injection can be used in conjunction with other NO<sub>x</sub> control methods such as burner modifications or flue gas recirculation. Some advanced designs of steam injection technology do not have as significant an impact on burner efficiency.

#### *Step 2: Eliminate Technically Infeasible Options (NO<sub>x</sub>)*

Add-on controls, such as, Selective Catalytic Reduction and Selective Non-Catalytic Reduction, are considered impractical for the 6.75 MMBtu/hr natural gas-fired batch annealing furnaces due to the small amount of particulate, SO<sub>2</sub> and NO<sub>x</sub> that will be emitted, the small size of the burners, and lack of exhaust gas capture systems. IDEM, OAQ, is not aware of any steel mills using any add-on control technology to control combustion-related emissions from combustion sources this small. Additionally the intermittent/cycling nature of these batch annealing furnaces prevents the use of SCR and SNCR. The batch/intermittent operation leads to fluctuations in the exhaust gas parameters such as flow and temperature, which greatly influence the effectiveness and feasibility of an SCR and SNCR. Therefore, SCR and SNCR have been determined to be technically infeasible for the small batch annealing furnaces at AK Steel Corporation.

Combustion control techniques that are external to the burner body, such as, Low Excess Air, Off-Stoichiometric Firing (consists of Burners Out of Service and Over Fire Air), Flue Gas Recirculation and Water/Steam Injection are also considered impractical due to the size of the units and configuration of the batch annealing furnaces because external combustion control techniques are more applicable to larger furnaces and retrofitting equipment is difficult.

Low NO<sub>x</sub> Burners are a viable control technology for the batch annealing furnaces. Low NO<sub>x</sub> burners are currently installed on the annealing furnaces at AK Steel as well as at several other sources.

Ultra Low NO<sub>x</sub> Burners incorporate a variety of control techniques including flue gas recirculation, water/steam injection, or a combination of control techniques to increase NO<sub>x</sub> reductions, which results in a design configuration that is reliable and efficient at temperatures typically above 1400 to 1450 degrees Fahrenheit. Below such temperatures these burners are inefficient and produce NO<sub>x</sub> emissions at higher levels than low NO<sub>x</sub> burners. Due to the nature of the batch annealing process, the furnace is required to control a temperature cycle with the majority of the time at lower temperatures and/or reduced load. Therefore, the use of ultra low NO<sub>x</sub> burners for the batch

annealing furnaces is considered technically infeasible.

*Step 3: Rank the Remaining Control Technologies by Control Effectiveness (NOx)*

The only technically feasible control option for NOx for the three (3) batch annealing furnaces has been determined to be low-NOx burners.

*Step 4: Evaluate The Most Effective Controls And Document The Results (NOx)*

The following table lists NOx BACT entries found in the U.S. EPA's RBLC for smaller (less than 20 MMBtu/hr) batch annealing furnaces from January 2001 through September 2011.

Facility: County, State	RBLC ID/Permit # (Issuance Date)	Process	Pollutant: Control, Emission Limits	Control Efficiency	Basis
AK Steel Corporation, Rockport Works: Spencer, IN	Current Project	3 Hydrogen Batch Annealing Furnaces (Natural Gas: 6.75 MMBtu/hr each)	AK Steel Proposed BACT: NOx: Low NOx Burners, 0.1 lb/MMBtu, 9.45 lb/hr for total of 18 batch annealing furnaces	N/A	
			IDEM Determined BACT: NOx: Low NOx Burners, 0.1 lb/MMBtu, 9.45 for total of 18 batch annealing furnaces	N/A	BACT-PSD
Nucor Steel: Montgomery, IN	IN-0090/107-12143-00038 (01/19/2001)	Batch Annealing Furnace, 18 (Natural Gas: 4.8 MMBtu/hr each)	NOx: Low NOx Burners, 0.1 lb/MMBtu	N/A	BACT-PSD
Nucor Steel, Arkansas: Mississippi, AR	AR-0090/1139-AOP-R6 (04/03/2006)	Annealing Furnaces SN-61 (Natural Gas: 4.8 MMBtu/hr)	NOx: Low NOx Burners, 0.3 lb/hr, 1.3 ton/yr, 0.1 lb/MMBtu	N/A	BACT-PSD
Carpenter Tech Corp: Berks, PA	PA-0262/06-05007D (10/01/2007)	Batch Annealing Furnaces (4) (Natural Gas: Estimated to be 8-10 MMBtu/hr each)	NOx: None Indicated, 3.2 lb/hr, 5.6 ton/yr (0.1 lb/MMBtu estimated)	N/A	Other Case-by-Case
Nucor Steel, Arkansas: Mississippi, AR	AR-0095/1139-AOP-R9 (12/12/2007)	Annealing Furnaces, SN-89 (Natural Gas: 4.8 MMBtu/hr each) (batch)	NOx: Low NOx Burners, 0.1 lb/MMBtu, 3.9 lb/hr, 16.8 ton/yr	N/A	BACT-PSD

Based on a review of comparable NOx BACT determinations for smaller batch annealing furnaces, the only control technology listed is low NOx burners. The emission limits are 0.1 lb/MMBtu for Nucor Steel (IN-0090), Nucor Steel (AR-0090), and Nucor Steel (AR-0095); and it was estimated that the emission limit for Carpenter Tech Corp (PA-0262) is 0.1 lb/MMBtu.

AK Steel Corporation proposes that BACT for the three (3) unpermitted batch annealing furnaces be the use of low NOx burners and an emission limit of 0.1 lb/MMBtu, with a total emission limit of 9.45 lb/hr for all eighteen (18) batch annealing furnaces combined.

Since the proposed BACT for the batch annealing furnaces meets the most stringent BACT for NOx, no further evaluation of this operation is required, and an economic, energy, or environmental impact analysis is not required as part the BACT evaluation for these operations.

*Step 5: Select BACT (NO<sub>x</sub>)*

Pursuant to PSD/SSM No. 147-28771-00041 and 326 IAC 2-2-3, the Best Available Control Technology for NO<sub>x</sub> emissions from the three (3) unpermitted batch annealing furnaces, identified as Nos. 16-18, shall be as follows:

- (a) NO<sub>x</sub> emissions shall be controlled by low NO<sub>x</sub> burners.
- (b) NO<sub>x</sub> emissions shall be less than 0.1 lb/MMBtu each.
- (c) NO<sub>x</sub> emissions shall be less than 9.45 lb/hr total for eighteen (18) batch annealing furnaces, identified as Nos. 1-18.

## BACT for Carbon Monoxide (CO)

The three (3) batch annealing furnaces to be evaluated for CO BACT were installed in 1999 and 2000. Each has a heat input capacity of 6.75 MMBtu/hr and is equipped with low NO<sub>x</sub> burners designed to burn natural gas only. All emissions from these natural gas-fired emission sources are products of combustion.

### *Step 1: Identify Potential Control Technologies (CO)*

#### **Good Combustion Practices**

Carbon Monoxide (CO) is formed during the combustion process because of incomplete combustion of carbon in the fuel. Good combustion practices are the primary means used to minimize the emission of carbon monoxide from combustion units. One of the most important steps is maintaining sufficient oxygen levels in the burner flames and throughout the combustion chamber where oxidation reactions go to completion. Leaks of ambient air into the combustion chamber should be avoided as much as possible because these leaks chill localized areas of the combustion chamber, which suppresses the oxidation reactions.

#### **Catalytic Oxidation**

Catalytic oxidation is typically applied for the destruction of organic vapors, but may also be used for controlling CO emissions. The combustion exhaust is routed through a catalyst bed, where oxidation of CO to CO<sub>2</sub> takes place. The catalyst is usually made of a precious metal such as platinum, palladium, or rhodium, which is supported on ceramic or metal carrier support structures, such as beads, woven mesh, screens, honeycombs, or pellets. The CO catalyst promotes the oxidation of CO and hydrocarbon compounds at certain temperatures to carbon dioxide and water as the emission stream passes through the catalyst bed. The oxidation process takes place spontaneously in the presence of sufficient temperatures.

### *Step 2: Eliminate Technically Infeasible Options (CO)*

Catalytic oxidation systems are typically used to control CO emissions from combustion turbines. The exhaust gas from the turbines is sufficiently high that no additional heat is needed in order for the oxidation reaction to occur. Exhaust gases from the annealing furnaces will undergo cooling as they are ducted from the furnace configuration and the temperature would not be sufficient for the oxidation reaction to occur. Due to the batch nature of this process, it is also not feasible to install a catalytic oxidation system with a recuperative or regenerative heat exchanger since these types of systems would require a more steady exhaust flow. Therefore, catalytic oxidation has been determined to be not technically feasible for the batch annealing furnaces.

### *Step 3: Rank the Remaining Control Technologies by Control Effectiveness (CO)*

The only technically feasible option for controlling CO emissions from the annealing furnaces is good combustion practices.

### *Step 4: Evaluate The Most Effective Controls And Document The Results (CO)*

The following table lists CO BACT entries found in the U.S. EPA's RBLC for smaller (less than 20 MMBtu/hr) batch annealing furnaces from January 2001 through September 2011.

Facility: County, State	RBL ID/Permit # (Issuance Date)	Process	Pollutant: Control, Emission Limits	Control Efficiency	Basis
AK Steel Corporation, Rockport Works: Spencer, IN	Current Project	3 Hydrogen Batch Annealing Furnaces (Natural Gas: 6.75 MMBtu/hr each)	AK Steel Proposed BACT: CO: None proposed	N/A	
			IDEM Determined BACT: CO: Good combustion practices, 0.084 lb/MMBtu each, 0.57 lb/hr each	N/A	BACT-PSD
Nucor Steel: Montgomery, IN	IN-0090/107-12143-00038 (01/19/2001)	Batch Annealing Furnace, 18 (Natural Gas: 4.8 MMBtu/hr each)	CO: Use of natural gas, 0.084 lb/MMBtu	N/A	BACT-PSD
Nucor Steel, Arkansas: Mississippi, AR	AR-0090/1139-AOP-R6 (04/03/2006)	Annealing Furnaces SN-61 (Natural Gas: 4.8 MMBtu/hr)	CO: Good combustion practice, 3.3 lb/hr, 14.1 ton/yr, 0.084 lb/MMBtu	N/A	BACT-PSD
Carpenter Tech Corp: Berks, PA	PA-0262/06-05007D (10/01/2007)	Batch Annealing Furnaces (4) (Natural Gas: Estimated to be 8-10 MMBtu/hr each)	CO: None Indicated, 3.2 lb/hr, 5.6 ton/yr (0.084 lb/MMBtu estimated)	N/A	Other Case-by-Case
Nucor Steel, Arkansas: Mississippi, AR	AR-0095/1139-AOP-R9 (12/12/2007)	Annealing Furnaces, SN-89 (Natural Gas: 4.8 MMBtu/hr each) (batch)	CO: Good Combustion Practice, 0.084 lb/MMBtu, 3.3 lb/hr, 14.1 ton/yr	N/A	BACT-PSD

Based on a review of comparable CO BACT determinations for smaller batch annealing furnaces, the only good combustion practice is listed for controlling CO emissions. The emission limits are 0.084 lb/MMBtu for Nucor Steel (IN-0090), Nucor Steel (AR-0090), and Nucor Steel (AR-0095); and the emission limit for Charter Specialty Steel (WI-0206) is 0.13 lb/MMBtu.

AK Steel Corporation did not propose a CO BACT for the three (3) unpermitted batch annealing furnaces. IDEM, OAQ has determined that BACT is good combustion practices with an emission limit of 0.084 lb/MMBtu. Since the top BACT is being selected for the small batch annealing furnaces, no further evaluation of this operation is required, and an economic, energy, or environmental impact analysis is not required as part the BACT evaluation for these operations.

*Step 5: Select BACT (CO)*

Pursuant to PSD/SSM No. 147-28771-00041 and 326 IAC 2-2-3, the Best Available Control Technology for CO emissions from the three (3) unpermitted batch annealing furnaces, identified as Nos. 16-18, shall be as follows:

- (a) CO emissions shall be controlled by good combustion practices.
- (b) CO emissions shall be less than 0.084 lb/MMBtu and 0.57 lb/hr each.

**BACT for Particulate (PM)**

The three (3) batch annealing furnaces to be evaluated for PM BACT were installed in 1999 and 2000. Each has a heat input capacity of 6.75 MMBtu/hr and is equipped with low NOx burners designed to burn natural gas only. All emissions from these natural gas-fired emission sources are products of combustion.

*Step 1: Identify Potential Control Technologies and Step 2: Eliminate Technically Infeasible Options (PM)*

Particulate matter (PM) is a complex mixture of small particles and liquid droplets. PM can be made up of a variety of components, including acids, organic chemicals, metals, and soil or dust particles. PM includes any size of filterable particulate (i.e., it does not include condensable particulate). Filterable particulate is the particulate that is emitted directly as a solid or liquid at the stack.

Because natural gas is a gaseous fuel, filterable PM emissions are typically low. Particulate matter from natural gas combustion has been estimated to be less than one (1) micrometer in size and has filterable and condensable fractions. Particulate matter in natural gas combustion are usually larger molecular weight hydrocarbons that are not fully combusted. Based on AP-42 emission factors for natural gas combustion, particulate is present predominately as condensable particulate (25% filterable and 75% condensable).

Add-on particulate control equipment, such as mechanical collectors, wet scrubbers, electrostatic precipitators, and baghouses, are typically only used for combustion sources for units with large burners that are combusting coal, wood, or other high-particulate generating fuel sources. As indicated above, filterable particulate from natural gas is low. Some determinations have concluded that BACT for natural gas combustion units is just the use of natural gas only. Due to the small size of the annealing furnace burners and the use of natural gas, it is determined that the use of add-on controls is not technically feasible for this application, as there would be very little filterable particulate to capture. Good combustion practices can aid in the minimization of particulate emissions with natural gas combustion.

*Step 3: Rank the Remaining Control Technologies by Control Effectiveness (PM)*

The only technically feasible option for controlling PM emissions from the annealing furnaces is good combustion practices.

*Step 4: Evaluate The Most Effective Controls And Document The Results (PM)*

The following table lists PM BACT entries found in the U.S. EPA's RBLC for smaller (less than 20 MMBtu/hr) batch annealing furnaces from January 2001 through September 2011.

Facility: County, State	RBLC ID/Permit # (Issuance Date)	Process	Pollutant: Control, Emission Limits	Control Efficiency	Basis
AK Steel Corporation, Rockport Works: Spencer, IN	Current Project	3 Hydrogen Batch Annealing Furnaces (Natural Gas: 6.75 MMBtu/hr each)	AK Steel Proposed BACT: PM: None proposed	N/A	
			IDEM Determined BACT: PM: Good combustion practices, 0.0019 lb/MMBtu each, 0.013 lb/hr each	N/A	BACT-PSD

Facility: County, State	RBL ID/Permit # (Issuance Date)	Process	Pollutant: Control, Emission Limits	Control Efficiency	Basis
Nucor Steel, Arkansas: Mississippi, AR	AR-0090/1139-AOP-R6 (04/03/2006)	Annealing Furnaces SN-61 (Natural Gas: 4.8 MMBtu/hr)	PM/PM10: Good Combustion Practice, 0.0076 lb/MMBtu, 0.3 lb/hr, 1.3 ton/yr	N/A	BACT-PSD
Nucor Steel, Arkansas: Mississippi, AR	AR-0095/1139-AOP-R9 (12/12/2007)	Annealing Furnaces, SN-89 (Natural Gas: 4.8 MMBtu/hr each) (batch)	PM/PM10: Good Combustion Practice, 0.0076 lb/MMBtu, 0.3 lb/hr, 1.3 ton/yr	N/A	BACT-PSD

Based on a review of PM BACT determinations for comparable smaller batch annealing furnaces, only two (2) determinations were found. For both Nucor Steel determinations, the evaluation was performed as PM/PM10, with the same determination for both pollutants. The permits indicate that emission limitations were based on AP-42 emission factors for natural gas combustion. The Arkansas Department of Environmental Quality included the filterable and condensable particulate fractions in both PM and PM10. As previously discussed, PM only includes the filterable portion of particulate. Therefore, based on the AP-42 emission factor for filterable particulate from natural gas combustion, emissions of PM should be limited at 0.0019 lb/MMBtu.

AK Steel Corporation did not propose a PM BACT for the three (3) unpermitted batch annealing furnaces. IDEM, OAQ has determined that BACT is good combustion practices with an emission limit of 0.0019 lb/MMBtu. Since the top BACT is being selected for the small batch annealing furnaces, no further evaluation of this operation is required, and an economic, energy, or environmental impact analysis is not required as part the BACT evaluation for these operations.

*Step 5: Select BACT (PM)*

Pursuant to PSD/SSM No. 147-28771-00041 and 326 IAC 2-2-3, the Best Available Control Technology for PM emissions from the three (3) unpermitted batch annealing furnaces, identified as Nos. 16-18, shall be as follows:

- (a) PM emissions shall be controlled by good combustion practices.
- (b) PM emissions shall be less than 0.0019 lb/MMBtu and 0.013 lb/hr each.

**BACT for Particulate Matter Less Than 10 Microns (PM10)**

The three (3) batch annealing furnaces to be evaluated for PM10 BACT were installed in 1999 and 2000. Each has a heat input capacity of 6.75 MMBtu/hr and is equipped with low NOx burners designed to burn natural gas only. All emissions from these natural gas-fired emission sources are products of combustion.

*Step 1: Identify Potential Control Technologies and Step 2: Eliminate Technically Infeasible Options (PM10)*

Particulate matter less than 10 microns (PM10) is a subset of PM that includes particulate with a diameter of 10 micrometers or less. PM10 includes both filterable and condensable portions of particulate.

The control options for PM10 for combustion are going to be similar to those for PM. As discussed in the previous section, add-on particulate control equipment for these small furnaces is not seen as technically feasible due to the small size of the furnaces, the use of natural gas, and the low potential PM10 emissions from these units. Good combustion practices can aid in the minimization of PM10 emissions with natural gas combustion.

*Step 3: Rank the Remaining Control Technologies by Control Effectiveness (PM10)*

The only technically feasible option for controlling PM10 emissions from the annealing furnaces is good combustion practices.

*Step 4: Evaluate The Most Effective Controls And Document The Results (PM10)*

The following table lists PM10 BACT entries found in the U.S. EPA's RBLC for smaller (less than 20 MMBtu/hr) batch annealing furnaces from January 2001 through September 2011.

Facility: County, State	RBLC ID/Permit # (Issuance Date)	Process	Pollutant: Control, Emission Limits	Control Efficiency	Basis
AK Steel Corporation, Rockport Works: Spencer, IN	Current Project	3 Hydrogen Batch Annealing Furnaces (Natural Gas: 6.75 MMBtu/hr each)	AK Steel Proposed BACT: PM: None proposed	N/A	
			IDEM Determined BACT: PM10: Good combustion practices, 0.0076 lb/MMBtu each, 0.051 lb/hr each	N/A	BACT-PSD
Nucor Steel, Arkansas: Mississippi, AR	AR-0090/1139-AOP-R6 (04/03/2006)	Annealing Furnaces SN-61 (Natural Gas: 4.8 MMBtu/hr)	PM10: Good Combustion Practice, 0.0076 lb/MMBtu, 0.3 lb/hr, 1.3 ton/yr	N/A	BACT-PSD
Nucor Steel, Arkansas: Mississippi, AR	AR-0095/1139-AOP-R9 (12/12/2007)	Annealing Furnaces, SN-89 (Natural Gas: 4.8 MMBtu/hr each) (batch)	PM10: Good Combustion Practice, 0.0076 lb/MMBtu, 0.3 lb/hr, 1.3 ton/yr	N/A	BACT-PSD

Based on a review of PM10 BACT determinations for comparable smaller batch annealing furnaces, only two (2) determinations were found. For both Nucor Steel determinations, the BACT for PM10 was determined to be good combustion practices with an emission limit of 0.0076 lb/MMBtu based on the AP-42 emission factor for natural gas combustion (for filterable and condensable particulate combined).

AK Steel Corporation did not propose a PM10 BACT for the three (3) unpermitted batch annealing furnaces. IDEM, OAQ has determined that BACT is good combustion practices with an emission limit of 0.0076 lb/MMBtu. Since the top BACT is being selected for the small batch annealing furnaces, no further evaluation of this operation is required, and an economic, energy, or environmental impact analysis is not required as part the BACT evaluation for these operations.

*Step 5: Select BACT (PM10)*

Pursuant to PSD/SSM No. 147-28771-00041 and 326 IAC 2-2-3, the Best Available Control Technology for PM10 emissions from the three (3) unpermitted batch annealing furnaces, identified as Nos. 16-18, shall be as follows:

- (a) PM10 emissions shall be controlled by good combustion practices.
- (b) PM10 emissions shall be less than 0.0076 lb/MMBtu and 0.051 lb/hr each.

**BACT for Volatile Organic Compounds (VOC)**

The three (3) batch annealing furnaces to be evaluated for VOC BACT were installed in 1999 and 2000. Each has a heat input capacity of 6.75 MMBtu/hr and is equipped with low NOx burners designed to burn natural gas only. All emissions from these natural gas-fired emission sources are products of combustion.

*Step 1: Identify Potential Control Technologies and Step 2: Eliminate Technically Infeasible Options (VOC)*

The rate of VOC emissions for natural gas combustion depends on combustion efficiency and can be minimized by combustion practices that promote high combustion temperatures, long residence times at those temperatures, and turbulent mixing of fuel and combustion air.

Types of add-on control device methodologies to control VOC emissions generally include thermal and catalytic oxidation, adsorption, absorption, and condensation. Based on a review of boilers and furnaces in the RBLC, very few use an add-on control device for controlling VOC emissions. Of those that do, the controls are required for larger units burning fuels other than natural gas, such as biomass and coal. There are a couple of natural gas boilers that require the use of catalytic oxidation, but the primary driver for the control is CO emissions. An oxidation catalyst has been determined to be technically infeasible in the CO BACT analysis that follows.

Due to the small size of the annealing furnace burners, the use of natural gas, and the batch nature of the process, it is determined that the use of add-on controls is not technically feasible for this application. Good combustion practices, however, can aid in the minimization of VOC emissions with natural gas combustion.

*Step 3: Rank the Remaining Control Technologies by Control Effectiveness (VOC)*

The only technically feasible option for controlling VOC emissions from the annealing furnaces is good combustion practices.

*Step 4: Evaluate The Most Effective Controls And Document The Results (VOC)*

The following table lists VOC BACT entries found in the U.S. EPA's RBLC for smaller (less than 20 MMBtu/hr) batch annealing furnaces from January 2001 through September 2011.

Facility: County, State	RBLC ID/Permit # (Issuance Date)	Process	Pollutant: Control, Emission Limits	Control Efficiency	Basis
AK Steel Corporation, Rockport Works: Spencer, IN	Current Project	3 Hydrogen Batch Annealing Furnaces (Natural Gas: 6.75 MMBtu/hr each)	AK Steel Proposed BACT: VOC: None proposed	N/A	
			IDEM Determined BACT: VOC: Good combustion practices, 0.0055 lb/MMBtu each, 0.037 lb/hr each	N/A	BACT-PSD
Nucor Steel, Arkansas: Mississippi, AR	AR-0090/1139-AOP-R6 (04/03/2006)	Annealing Furnaces SN-61 (Natural Gas: 4.8 MMBtu/hr)	VOC: Good Combustion Practice, 0.3 lb/hr, 1 ton/yr, 0.0055 lb/MMBtu	N/A	BACT-PSD

Facility: County, State	RBL ID/Permit # (Issuance Date)	Process	Pollutant: Control, Emission Limits	Control Efficiency	Basis
Carpenter Tech Corp: Berks, PA	PA-0262/06-05007D (10/01/2007)	Batch Annealing Furnaces (4) (Natural Gas: Estimated to be 8-10 MMBtu/hr each)	VOC: None Indicated, 0.2 lb/hr, 0.35 ton/yr (0.0055 lb/MMBtu estimated)	N/A	Other Case-by-Case

Based on a review of VOC BACT determinations for comparable smaller batch annealing furnaces, only two (2) determinations were found. The determination for Nucor Steel (AR-0090) includes good combustion practices and an emission limit of 0.0055 lb/MMBtu. The determination for Carpenter Tech Corp (PA-0262) does not indicate a control and has an estimated calculated emission limit of 0.0055 lb/MMBtu.

AK Steel Corporation did not propose a VOC BACT for the three (3) unpermitted batch annealing furnaces. IDEM, OAQ has determined that BACT is good combustion practices with an emission limit of 0.0055 lb/MMBtu. Since the top BACT is being selected for the small batch annealing furnaces, no further evaluation of this operation is required, and an economic, energy, or environmental impact analysis is not required as part the BACT evaluation for these operations.

*Step 5: Select BACT (VOC)*

Pursuant to PSD/SSM No. 147-28771-00041 and 326 IAC 2-2-3, the Best Available Control Technology for VOC emissions from the three (3) unpermitted batch annealing furnaces, identified as Nos. 16-18, shall be as follows:

- (a) VOC emissions shall be controlled by good combustion practices.
- (b) VOC emissions shall be less than 0.0055 lb/MMBtu and 0.037 lb/hr each.

# Indiana Department of Environmental Management Office of Air Quality

## TSD Appendix C – Air Quality Analysis for a Part 70 PSD/Significant Source Modification and Significant Permit Modification

Source Description and Location
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Source Name:	AK Steel Corporation, Rockport Works
Source Location:	6500 North US 231, Rockport, IN 47635
County:	Spencer
SIC Code:	3312
Operation Permit No.:	T147-11043-00041
Operation Permit Issuance Date:	September 1, 2006
PSD/Significant Source Modification No.:	147-28771-00041
Significant Permit Modification No.:	147-28980-00041
Modeling Reviewer:	Michael Mosier

### Background

AK Steel Corporation, Rockport Works submitted their original PSD application in 1996. The original permit had an overall emission limit for fifteen (15) batch annealing furnaces. AK Steel installed three (3) more furnaces in 1999 and in 2000 without the proper approval to construct and operate. The Office of Air Quality performed the air quality modeling analysis for the three (3) unpermitted batch annealing furnaces at AK Steel.

### Analysis Summary

Based on the potential emissions after controls, a significant impact air quality analysis was included for CO, PM, PM<sub>10</sub>, and NO<sub>2</sub>. The significant impact analysis for CO, NO<sub>2</sub>, PM, and PM<sub>10</sub> determined that modeling concentrations did not exceed the significant impact levels for any of the NAAQS.

### Pollutants Analyzed for the Significant Impact Air Quality Analysis

#### Potential Emissions

The potential to emit of the pollutants being evaluated (CO, PM, PM<sub>10</sub>, and NO<sub>2</sub>) are summarized below in Table 1. CO, PM, PM<sub>10</sub>, and NO<sub>2</sub> potential emissions after controls do not exceed the PSD significant emission rates but a significant impact air quality analysis was performed anyway.

**TABLE 1**  
**Significant Emission Rates for PSD**

POLLUTANT	SOURCE EMISSION RATE (tons/year)	SIGNIFICANT EMISSION RATE (tons/year)	PRELIMINARY AQ ANALYSIS REQUIRED
PM	0.17	25	No
PM <sub>10</sub>	0.66	10/15	No
NO <sub>2</sub>	8.7	40	No

POLLUTANT	SOURCE EMISSION RATE (tons/year)	SIGNIFICANT EMISSION RATE (tons/year)	PRELIMINARY AQ ANALYSIS REQUIRED
CO	7.3	100	No

AK Steel’s potential emission rates were taken from an emissions calculation sheet in Appendix A of the technical support document. The emission rates that were modeled are in Table 1 above.

**Good Engineering Practice (GEP), Met Data, Model Used, Receptor Grid**

**Stack Height Compliance with Good Engineering Practice (GEP)**

**Applicability**

Stacks should comply with GEP requirements established in 326 IAC 1-7-4. If stacks are lower than GEP, excessive ambient concentrations due to aerodynamic downwash may occur. Dispersion modeling credit for stacks taller than 65 meters (213 feet) are limited to GEP for the purpose of establishing emission limitations. The GEP stack height takes into account the distance and dimensions of nearby structures, which would affect the downwind wake of the stack. The downwind wake is considered to extend five times the lesser of the structure’s height or width. A GEP stack height is determined for each nearby structure by the following formula:

$$H_g = H + 1.5L$$

Where: H<sub>g</sub> is the GEP stack height  
 H is the structure height  
 L is the structure's lesser dimension (height or width)

**Stacks**

Since the stack heights for AK Steel are below GEP stack height, the effect of aerodynamic downwash will be accounted for in the air quality analysis.

**Meteorological Data**

The meteorological data used in AERMOD consisted of 1988 through 1992 surface data from Evansville, Indiana and upper air measurements taken at Peoria, Illinois. The meteorological data was downloaded from Lakes Environmental and preprocessed using AERMET.

**Model Description**

The Office of Air Quality (OAQ) used AERMOD Version 09292. All regulatory default options were utilized in the U.S. EPA approved model, as listed in the 40 Code of Federal Register Part 51, Appendix W “Guideline on Air Quality Models”.

**Receptor Grid**

OAQ modeling used the original receptor grid that was used in the 1996 modeling demonstration. The receptor grid is a discrete polar grid consisting of 611 receptors with property boundary receptors.

## Significant Impact Air Quality Analysis

A significant impact analysis was conducted to determine if the source would exceed the PSD significant impact levels (concentrations). If the source's concentrations exceed these levels, further air quality analysis is required. Refined modeling for CO, PM, PM10, and NO2 was not required because the results did not exceed significant impact levels. Significant impact levels are defined by the following time periods in Table 2 below with all maximum-modeled concentrations calculated from the potential emission rates. A full conversion of NOx to NO2 was assumed. Since PM emissions were less than PM10, the maximum modeled concentration for PM would be less than what is shown in Table 2.

**TABLE 2**  
**Significant Impact Analysis**

POLLUTANT	TIME AVERAGING PERIOD	MAXIMUM MODELED IMPACTS (ug/m <sup>3</sup> )	SIGNIFICANT IMPACT LEVEL (ug/m <sup>3</sup> )	REFINED AQ ANALYSIS REQUIRED
NO <sub>2</sub>	1 hour	7.133	7.55	No
NO <sub>2</sub>	Annual	0.240	1	No
PM/PM <sub>10</sub>	Annual	0.018	1	No
PM/PM <sub>10</sub>	24 hour	0.107	5	No
CO	8 hour	2.82	500	No
CO	1 hour	9.33	2000	No

## Summary of Air Quality Analysis

Modeling results taken from the AERMOD model showed CO, PM, PM10, and NO2 impacts were predicted to be less than the significant impact levels. Since AK Steel did not go above the significant impact levels no further modeling is required.



# 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 26, 2012

Mr. Ron Mundel  
AK Steel Corporation, Rockport Works  
6500 U.S. 231 North  
Rockport, IN 47635

Re: Public Notice  
AK Steel Corporation  
Permit Level: Title V  
Permit Number: 28771 and 28980

Dear Mr. Mundel:

Enclosed is a copy of your draft Title V, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has submitted the draft permit package to the Spencer County Public Library, 210 Walnut Street Broadway, Rockport, IN 47635-1398. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper. The OAQ has requested that the *The Journal Democrat in Rockport, Indiana* publish this notice no later than March 29, 2012.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Laura Spriggs, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 3-5693 or dial (317) 233-5693.

Sincerely,

Debra Pabst  
Permits Branch  
Office of Air Quality

Enclosures  
PN Applicant Cover letter. dot 3/27/08



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## **ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING**

March 22, 2012

*The Journal Democrat*  
P.O. Box 6  
Rockport, Indiana 47635

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for AK Steel in Spencer County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than March 29, 2012.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call «admincontact» at 800-451-6027 and ask for extension 3-5693 or dial 317-233-5693.

Sincerely,

*Debra Pabst*  
Permit Branch  
Office of Air Quality

cc: Pat Cuzzort: OAQ Billing, Licensing and Training Section  
Permit Level: Title V  
Permit Number: 147-29880-00041

Enclosure  
PN Newspaper.dot 3/27/08



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

To: Spencer County Public Library

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

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

**Applicant Name: AK Steel**  
**Permit Number: 147-28771-00041 & 147-28980-00041**

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Request to publish the Notice of 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. **Please make this information readily available until you receive a copy of the final package.**

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. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures  
PN Library.dot 03/27/08



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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## Notice of Public Comment

**March 26, 2012**

**Applicant Name: AK Steel**  
**Permit Number: 147-28771-00041 & 147-28980-00041**

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

**Please Note:** *If you feel you have received this Notice 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. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure  
PN AAA Cover.dot 3/27/08

# Mail Code 61-53

IDEM Staff	DPABST 3/26/2012 AK Steel Corporation 28771 & 28980 (Draft)		<b>CERTIFICATE OF MAILING ONLY</b>	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Ron Mundel AK Steel Corporation 6500 US 231 N Rockport IN 47635 (Source CAATS)									
2		Matthew J Ludwig GM AK Steel Corporation 6500 US 231 N Rockport IN 47635 (RO CAATS)									
3		Jerry L. & Pamela D. Aigner 1622 Square Deal Road Boonville IN 47601 (Affected Party)									
4		Catherine L. Litkenhus and Family Trust R. R. 1 Chrisney IN 47611 (Affected Party)									
5		Mr. Paul V. Masterson 2012 West 900 North Chrisney IN 47611 (Affected Party)									
6		Geneva King 200 South Peerless Evansville IN 47712 (Affected Party)									
7		Mr. Wendell Hibdon Plumbers & Steam Fitters Union, Local 136 2300 St. Joe Industrial Park Dr Evansville IN 47720 (Affected Party)									
8		Mr. David Coker Save Our Land and Environment 1601 Western Hills Drive Evansville IN 47720 (Affected Party)									
9		Mr. Thomas L. Shaw 7400 St. Joe Road Evansville IN 47720 (Affected Party)									
10		Ms. Francis Lueken 223 W. 10th Street, P.O. Box 206 Ferdinand IN 47532 (Affected Party)									
11		Mr. Wayne Werne 10185 E SR 62 Ferdinand IN 47532 (Affected Party)									
12		Lester Purviance 2687 East CR 600 North Grandview IN 47615 (Affected Party)									
13		Richard & Betty Michel 2222 E. County Rd 700 N. Grandview IN 47615 (Affected Party)									
14		John D. & Sylvia L. Holbrook R. R. 1, Box 352 Grandview IN 47615 (Affected Party)									
15		Mr. Tim Duncan 7499 N. CR 200 E. Grandview IN 47615 (Affected Party)									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <b>Domestic Mail Manual R900, S913, and S921</b> for limitations of coverage on inured and COD mail. See <b>International Mail Manual</b> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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1		Dan 2680 F 1650 W Lincoln City IN 47552 (Affected Party)										
2		Ms. Andrea Herrera 10546 North McDonald Avenue Evanston IN 47531 (Affected Party)										
3		Ms. Lisa Madison 6455 N. US Highway 231 Gentryville IN 47537 (Affected Party)										
4		Mr. Ian Thake P.O. Box 737 Santa Claus IN 47579 (Affected Party)										
5		Evelyn Drury 3056 W. CR Road 375 N. Rockport IN 47635 (Affected Party)										
6		Ms. Krista Rasor 232 West 500 N. Rockport IN 47635 (Affected Party)										
7		Ms. Donna R. Martin 1524 S Old State Road 45 Rockport IN 47635 (Affected Party)										
8		Mr. Doug Matthews PO Box 501 Rockport IN 47635 (Affected Party)										
9		Mr. Ferman Yearby III 313 Elm Rockport IN 47635 (Affected Party)										
10		Karl L. & Emma Lou Kramer 639 W. CR 500 N. Rockport IN 47635 (Affected Party)										
11		Elmer O & Rebecca J. Gentry 883 E. CR. 500 N. Rockport IN 47635 (Affected Party)										
12		Elmer J. & Faye Evelyn Hall 2524 W. State Road 66 Rockport IN 47635 (Affected Party)										
13		Mr. Earl Lauer Trailer Court 814 N Lincoln Aveune Rockport IN 47635 (Affected Party)										
14		Mr. Harlan Lehr 1441 N. Base Road Rockport IN 47635 (Affected Party)										
15		Rockport City Council and Mayors Office P.O. Box 151 Rockport IN 47635 (Local Official)										

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											Remarks
1		Curran 538 S 9th Street Rockport IN 47635 (Affected Party)									
2		Kenneth & Carol Shourds 4606 N. US Hwy 231 Rockport IN 47635 (Affected Party)									
3		Warren W. & Lorene Dimmett P.O. Box 463 Rockport IN 47635-0463 (Affected Party)									
4		Spencer Co Public Library 210 N Walnut St Rockport IN 47635-1398 (Library)									
5		Mr. Thomas Utter Lincolnland Economical Development Corporation PO Box 400 Santa Claus IN 47579 (Affected Party)									
6		Mr. Adam Lee United Steel Workers of America, Strategic Camp. 5 Gateway Center Pittsburg PA 15222 (Affected Party)									
7		Mr. Don & Joyce Copeland CR 7749 200 East Grandview IN 47616 (Affected Party)									
8		Mr. Don Mottley Save Our Rivers 6222 Yankeetown Hwy Boonville IN 47601 (Affected Party)									
9		Ms. Diane Hemingway 2877 Gains Bassin Road Albion NY 14411 (Affected Party)									
10		Ms. Kathy Tretter Dubois-Spencer Counties Publishing Co, Inc P.O. Box 38 Ferdinand IN 47532-0038 (Affected Party)									
11		Mr. Aaron Mundy PO Box 525 Santa Claus IN 47579 (Affected Party)									
12		Bill & Sandy Woodall 3033 S. Amherst Drive S. Rockport IN 47635 (Affected Party)									
13		Ms. Helen Roberta Mulzer 401 Tenth Street Tell City IN 47586 (Affected Party)									
14		Mr. Rex Winchell 715 W. Old SR 45 Rockport IN 47635 (Affected Party)									
15		Mr. Larry E. Sigler 668 East C.R. 700 North Chrisney IN 47611-9315 (Affected Party)									

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1		Michael Wayne 515 East US Highway 231 Chrisney IN 47611-9571 (Affected Party)										
2		Willard & Nan Hardin 210 West Jennings Newburgh IN 47630 (Affected Party)										
3		Ms. Laura Pounds 847 W. Base Road Rockport IN 47635 (Affected Party)										
4		Mr. James C. Jones 718 Main Street Rockport IN 47635 (Affected Party)										
5		Dottie Woolen 815 S. CR 100 W. Rockport IN 47635 (Affected Party)										
6		Walter & Roberta Beumel 3502 E. CR 1400 N. Chrisney IN 47611 (Affected Party)										
7		Mr. Al Perdue 200 Main Street Rockport IN 47635 (Affected Party)										
8		Paul John 12338 N. St. Peter Road Lamar IN 47550 (Affected Party)										
9		Mr. John Rose 208 South Cherry Street Huntingburg IN 47542 (Affected Party)										
10		Keisha Staup P.O.Box 62 St Meinrad IN 47577 (Affected Party)										
11		Justin Mehling 20785 N. Dilger Road St Meinrad IN 47577 (Affected Party)										
12		Christine Skinner 7922 N Highland Road Grandview IN 47615 (Affected Party)										
13		Ms. Deborah Steinkamp Spencer County Solid Waste Management 918 E County Road 800 North Chrisney IN 47611 (Affected Party)										
14		Ms. Irene Schaefer 35 South Church Street Chrisney IN 47611 (Affected Party)										
15		Mr. Rex L. Windell 715 W. SR 45 Rockport IN 47635 (Affected Party)										

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1		Richard 2222 E CR 700N Grandview IN 47615 (Affected Party)										
2		Spencer County Commissioners 200 Main St., Courthouse Rockport IN 47635 (Local Official)										
3		Spencer County Health Department Main Street Courthouse, 1st Floor, Room 1 Roackport IN 47635-1492 (Health Department)										
4		Mr. Mark Wilson Evansville Courier & Press P.O. Box 268 Evansville IN 47702-0268 (Affected Party)										
5		Precision Strip 6500 North US Route 231 Rockport IN 47635 (Affected Party)										
6		Mr. John Blair 800 Adams Ave Evansville IN 47713 (Affected Party)										
7		Spencer County Public Library 210 Walnut St. Rockport IN 47635 (Library)										
8		Jim Perkins, Jr. 321 Chestnut Street Chrisney IN 47611 (Affected Party)										
9		David Lovell 1133 S. CR 350 W Rockport IN 47635 (Affected Party)										
10		Ken Shrouds 4350 N. US #231 Rockport IN 47635 (Affected Party)										
11		Indiana Michigan Power (d.b.a. AEP) - Rockport 2791 N. US #231 Rockport IN 47635 (Affected Party)										
12		ISSI-AMROX 2001 E. CR 700 N Grandview IN 47615 (Affected Party)										
13		Maurice Decker 5349 N. CR 200 E Grandview IN 47615 (Affected Party)										
14		David Holbrook 2331 E. CR 600 N Grandview IN 47615 (Affected Party)										
15		Catherine Litkenhus Family Trust 42 E. High Street Chrisney IN 47611 (Affected Party)										

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1		Norma 609 E. CR 500 N Rockport IN 47635 (Affected Party)										
2		William S. Hesson 354 E. CR 500 N Rockport IN 47635 (Affected Party)										
3		Richard D. Young Indiana State Senate; 200 W Washington Street Indianapolis IN 46204 (Affected Party)										
4		Russ Stillwell Indiana State Senate; 200 West Washington Street Indianapolis IN 46204 (Affected Party)										
5		David Boggs 216 Western Hills Dr Mt Vernon IN 47620 (Affected Party)										
6												
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12												
13												
14												
15												

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <b>Domestic Mail Manual R900, S913, and S921</b> for limitations of coverage on inured and COD mail. See <b>International Mail Manual</b> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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