



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding the Renewal of a Part 70 Operating Permit

for American Iron Oxide Company in Spencer County

Part 70 Operating Permit No. 147-29980-00050

The Indiana Department of Environmental Management (IDEM), has received an application from American Iron Oxide Company located at 2001 E CR 700 North, Grandview, Indiana for a renewal of its Part 70 Operating Permit issued on September 5, 2006. If approved by IDEM's Office of Air Quality (OAQ), this proposed renewal would allow American Iron Oxide Company to continue to operate its existing source.

This draft Title V permit does not contain any new equipment that would emit air pollutants; however, some conditions from previously issued permits/approvals have been corrected, changed or removed. These corrections, changes, and removals may include Title I changes (exchanges that add or modify synthetic minor emission limits). This notice fulfills the public notice procedures to which those conditions are subject. IDEM has reviewed this application, and has developed preliminary findings, consisting of a draft permit and several supporting documents, that would allow for these changes.

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

Spencer County Public Library
210 Walnut Street
Rockport, IN 47635

and

IDEM Southwest Regional Office
1120 Vincennes Ave
P.O. Box 128
Petersburg, IN 47567

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 30th 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 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 number T147-29980-00050 in all correspondence.

Comments should be sent to:

Josiah Balogun
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension (4-5257)
Or dial directly: (317) 234-5257
Fax: (317)-232-6749 attn: (Josiah Balogun)
E-mail: jbalogun@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.

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 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251 and IDEM Southwest Regional Office 1120 Vincennes Ave, P.O. Box 128, Petersburg, IN 47567.

If you have any questions please contact Josiah Balogun of my staff at the above address.

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



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DRAFT

Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

**American Iron Oxide Company
2001 East County Road 700 North
Grandview, Indiana 47615**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

| | |
|--|------------------|
| Operation Permit No.: T147-29980-00050 | |
| Issued by: | Issuance Date: |
| Tripurari P. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality | Expiration Date: |

TABLE OF CONTENTS

A. SOURCE SUMMARY

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

B. GENERAL CONDITIONS

- B.1 Definitions [326 IAC 2-7-1]
- B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)]
[IC 13-15-3-6(a)]
- B.3 Term of Conditions [326 IAC 2-1.1-9.5]
- B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]
- B.5 Severability [326 IAC 2-7-5(5)]
- B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]
- B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]
- B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]
- B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]
- B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)][326 IAC 2-7-6(1) and (6)]
[326 IAC 1-6-3]
- B.11 Emergency Provisions [326 IAC 2-7-16]
- B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]
- B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]
- B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]
- B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]
- B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]
- B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12] [40 CFR 72]
- B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]
[326 IAC 2-7-12(b)(2)]
- B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]
- B.20 Source Modification Requirement [326 IAC 2-7-10.5]
- B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]
- B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
- B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]
- B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

C. SOURCE OPERATION CONDITIONS

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

- C.1 Particulate Emission Limitations For Processes with Process Weight Rates
Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]
- C.2 Opacity [326 IAC 5-1]
- C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

- C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
- C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]
- C.7 Stack Height [326 IAC 1-7]
- C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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

- C.11 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]
- C.12 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.13 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]
- C.14 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]
- C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]

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

- C.16 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)]
[326 IAC 2-6]
- C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2]
- C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]
[326 IAC 2-2]

Stratospheric Ozone Protection

- C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1. EMISSIONS UNIT OPERATION CONDITIONS

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

- D.1.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]
- D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

Compliance Determination Requirements

- D.1.3 Particulate Control [326 IAC 2-7-6(1)]
- D.1.4 Broken or Failed Bag Detection
- D.1.5 Testing Requirements [326 IAC 2-1.1-11]

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

- D.1.6 Visible Emission Notation
- D.1.7 Baghouse Parametric Monitoring
- D.1.8 Venturi Scrubber Parametric Monitoring
- D.1.9 Scrubber Failure Detection [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

D.1.10 Compliance Assurance Monitoring [40 CFR 64]

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

D.1.11 Record Keeping Requirements

D.2. EMISSIONS UNIT OPERATION CONDITIONS

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

D.2.1 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

E.1. EMISSIONS UNIT OPERATION CONDITIONS

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

E.1.1 General Provisions Relating to National Emission Standard for Hazardous Air Pollutants (NESHAP) [326 IAC 20-1-1] [40 CFR 63, Subpart A]

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

Certification

Emergency Occurrence Report

Quarterly Report

Quarterly Deviation and Compliance Monitoring Report

SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary iron oxide and hydrochloric acid production source.

| | |
|------------------------------|--|
| Source Address: | 2001 E CR 700 North, Grandview, Indiana 47615 |
| General Source Phone Number: | 219-763-1199 |
| SIC Code: | 2819 |
| County Location: | Spencer |
| Source Location Status: | Attainment for all criteria pollutants |
| Source Status: | Part 70 Operating Permit Program Minor Source, under PSD Rules Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories |

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

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

- (a) Process line no. 1, constructed in 1999:
 - (1) One (1) hydrochloric acid production system with a maximum processing rate of 15 tons per hour of ferrous chloride solution. This system consists of one (1) natural gas-fired spray roaster, identified as R-1, utilizing a tangential firing method and low-NO_x burners, with a maximum heat input rate of 39.6 million British thermal units per hour; one (1) venturi separator/scrubber which controls particulate emissions; one (1) absorber; and two (2) packed tower scrubbers in series and a mist eliminator for HCl control. This system exhausts through a stack, identified as S-1. Under NESHAP Subpart CCC, this is a hydrochloric acid recovery system.
 - (2) Two (2) iron oxide storage bins, identified as O-1 and O-2, with a storage capacity of 100 tons, each, and a maximum throughput rate of 1.0 ton of iron oxide/nickel ferrite per hour, total, each attached to an individual baghouse for particulate control, and exhausting through individual stacks, identified as O-1 and O-2, respectively.
- (b) Process line no. 2, constructed in 1999:
 - (1) One (1) hydrochloric acid production system with a maximum processing rate of 15 tons per hour of ferrous chloride solution. This system consists of one (1) natural gas-fired spray roaster, identified as R-2, utilizing a tangential firing method and low-NO_x burners, with a maximum heat input rate of 39.6 million

British thermal units per hour; one (1) venturi separator/scrubber which controls particulate emissions; one (1) absorber; and two (2) packed tower scrubbers in series and a mist eliminator for HCl control. This system exhausts through a stack, identified as S-2. Under NESHAP Subpart CCC, this is a hydrochloric acid recovery system.

- (2) Two (2) iron oxide storage bins, identified as O-3 and O-4, with a storage capacity of 100 tons, each, and a maximum throughput rate of 1.0 ton of iron oxide/nickel ferrite per hour, total, each attached to an individual baghouse for particulate control, and exhausting through individual stacks, identified as O-3 and O-4, respectively.
- (c) One (1) chlorination system, constructed in 2002, with a maximum chlorine usage of 900 pounds per hour. This system consists of one (1) chlorinator, identified as C-1, attached to a chlorination scrubber for HCl and chlorine emissions control, and exhausting through a stack, identified as C-1.
- (d) One (1) solvent extraction system, identified as TV-1, constructed in 1999, exhausting through a stack identified as TV-1. This system includes one (1) 40,000 gallon octanol storage tank, identified as T-17.
- (e) One (1) tank farm, identified as TS-1, each tank constructed in June 1998, consisting of fifteen (15) 50,000 gallon storage tanks for product hydrochloric acid, or ferrous chloride solution, identified as T-1 through T-9 and T-11 through T-16, and one (1) 35,000 gallon storage tank for virgin hydrochloric acid, identified as T-10. Each of these tanks is attached to a common fume scrubber to control vapor loss and exhaust to a common stack, identified as TS. Under NESHAP Subpart CCC, these are hydrochloric acid storage vessels.

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

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million British thermal units per hour:

One (1) natural gas-fired boiler, identified as B-1, constructed in 2002, utilizing a normal firing method and ultra low-NO_x burners, with a maximum heat input rate of 8.0 million British thermal units per hour, and exhausting through a stack, identified as B-1.

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

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

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

SECTION B GENERAL CONDITIONS

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

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

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

- (a) This permit, T147-29980-00050, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit or of permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

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

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

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

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

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

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

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

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

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

requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

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

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

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

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

and

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

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

- (2) The compliance status;
- (3) Whether compliance was continuous or intermittent;
- (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
- (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

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

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

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

The Permittee shall implement the PMPs.

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

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the 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.

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

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

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, or 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

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

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

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

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
 - (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
 - (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
 - (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency

provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

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

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

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

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
- (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

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

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

- (a) All terms and conditions of permits established prior to T147-29980-00050 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit, except for permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control)

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

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

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

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

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

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

Request for renewal shall be submitted to:

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

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

B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12] [40 CFR 72]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Pursuant to 326 IAC 2-7-11(b) and 326 IAC 2-7-12(a), administrative Part 70 operating permit amendments and permit modifications for purposes of the acid rain portion of a

Part 70 permit shall be governed by regulations promulgated under Title IV of the Clean Air Act. [40 CFR 72]

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

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

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

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

B.18 Permit Revision Under Economic Incentives and Other Programs
[326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

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

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

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

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality

100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

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

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

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

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

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

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

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require 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.
- (f) This condition does not apply to emission trades of SO₂ or NO_x under 326 IAC 21 or 326 IAC 10-4.

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

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

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

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

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

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

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

responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

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

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

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

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

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

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

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

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

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

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

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

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

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

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

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

C.6 Stack Height [326 IAC 1-7]

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

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (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.8 Performance Testing [326 IAC 3-6]

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.10 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, 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.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

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

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

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

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

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

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual

manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

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

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

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

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

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

In accordance with the compliance schedule specified in 326 IAC 2-6-3(b), starting in 2006 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

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

The statement must be submitted to:

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

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

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

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.17 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. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that

meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

- (b) The address for report submittal is:

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

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

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

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) Process line no. 1, constructed in 1999:
 - (1) One (1) hydrochloric acid production system with a maximum processing rate of 15 tons per hour of ferrous chloride solution. This system consists of one (1) natural gas-fired spray roaster, identified as R-1, utilizing a tangential firing method and low-NO_x burners, with a maximum heat input rate of 39.6 million British thermal units per hour; one (1) venturi separator/scrubber which controls particulate emissions; one (1) absorber; and two (2) packed tower scrubbers in series and a mist eliminator for HCl control. This system exhausts through a stack, identified as S-1. Under NESHAP Subpart CCC, this is a hydrochloric acid recovery system.
 - (2) Two (2) iron oxide storage bins, identified as O-1 and O-2, with a storage capacity of 100 tons, each, and a maximum throughput rate of 1.0 ton of iron oxide/nickel ferrite per hour, total, each attached to an individual baghouse for particulate control, and exhausting through individual stacks, identified as O-1 and O-2, respectively.
- (b) Process line no. 2, constructed in 1999:
 - (1) One (1) hydrochloric acid production system with a maximum processing rate of 15 tons per hour of ferrous chloride solution. This system consists of one (1) natural gas-fired spray roaster, identified as R-2, utilizing a tangential firing method and low-NO_x burners, with a maximum heat input rate of 39.6 million British thermal units per hour; one (1) venturi separator/scrubber which controls particulate emissions; one (1) absorber; and two (2) packed tower scrubbers in series and a mist eliminator for HCl control. This system exhausts through a stack, identified as S-2. Under NESHAP Subpart CCC, this is a hydrochloric acid recovery system.
 - (2) Two (2) iron oxide storage bins, identified as O-3 and O-4, with a storage capacity of 100 tons, each, and a maximum throughput rate of 1.0 ton of iron oxide/nickel ferrite per hour, total, each attached to an individual baghouse for particulate control, and exhausting through individual stacks, identified as O-3 and O-4, respectively.
- (c) One (1) chlorination system, constructed in 2002, with a maximum chlorine usage of 900 pounds per hour. This system consists of one (1) chlorinator, identified as C-1, attached to a chlorination scrubber for HCl and chlorine emissions control, and exhausting through a stack, identified as C-1.
- (d) One (1) solvent extraction system, identified as TV-1, constructed in 1999, exhausting through a stack identified as TV-1. This system includes one (1) 40,000 gallon octanol storage tank, identified as T-17.

- (e) One (1) tank farm, identified as TS-1, each tank constructed in June 1998, consisting of fifteen (15) 50,000 gallon storage tanks for product hydrochloric acid, or ferrous chloride solution, identified as T-1 through T-9 and T-11 through T-16, and one (1) 35,000 gallon storage tank for virgin hydrochloric acid, identified as T-10. Each of these tanks is attached to a common fume scrubber to control vapor loss and exhaust to a common stack, identified as TS. Under NESHAP Subpart CCC, these are hydrochloric acid storage vessels.

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

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

D.1.1 Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2] [326 IAC 6-3-2]

The permittee shall comply with the following:

- (a) The PM, PM₁₀ and PM_{2.5} emissions from the two (2) hydrochloric acid production systems exhaust stack shall be less than 17.1 pounds per hour, each.
- (b) The PM, PM₁₀ and PM_{2.5} emissions from the four (4) iron oxide storage bins, identified as O-1 through O-4 shall be less than 4.0 pounds per hour, each.

Compliance with the above limits in combination with the potential PM, PM₁₀ and PM_{2.5} emissions from other emission units, will limit the sourcewide PM, PM₁₀ and PM_{2.5}, emissions to less than 100 tons per year, respectively and render the requirements of 326 IAC 2-2 (PSD) not applicable to this source.

Note: The PSD Minor limits will satisfy the requirements of 326 IAC 6-3-2.

D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan (PMP) is required for this unit and its control device. Section B - Preventive Maintenance Plan contains the Permittee's obligations with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.3 Particulate Control [326 IAC 2-7-6(1)]

- (a) In order to comply with Conditions D.1.1 and D.1.2, the venturi scrubber and baghouses shall be in operation at all times when the iron oxide and hydrochloric acid production plant are in operation.
- (b) 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.1.4 Broken or Failed Bag Detection

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

Bag failure can be indicated by a significant drop in the baghouses 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.1.5 Testing Requirements [326 IAC 2-1.1-11]

- (a) In order to determine compliance with Condition D.1.1(a), the Permittee shall perform PM, PM₁₀ and PM_{2.5} testing on packed tower and venturi scrubbers controlling the hydrochloric acid production plant, identified as R-1 or hydrochloric acid production plant, identified as R-2, utilizing methods as approved by the Commissioner. 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 Procedures). Section C - Performance Testing contains the Permittee's obligations with regard to the performance testing required by this condition.
- (b) In order to determine compliance with Condition D.1.1(b), the Permittee shall perform PM, PM₁₀ and PM_{2.5} testing on baghouses controlling the four (4) iron oxide storage bins, identified as O-1, O-2, O-3 and O-4, utilizing methods as approved by the Commissioner. 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 Procedures). Section C - Performance Testing contains the Permittee's obligations with regard to the performance testing required by this condition.

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

D.1.6 Visible Emissions Notations

- (a) Visible emission notations of the hydrochloric acid production system and iron oxide storage bin stack exhausts (stack S-1, S-2, O-1, O-2, O-3 and O-4) shall be performed once per day during normal daylight operations. 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. Failure to take response steps shall be considered a deviation from this permit. Section C – Response to Excursions or Exceedances contains the Permittee's obligations with regard to responding to the reasonable response steps required by this condition.

D.1.7 Baghouse Parametric Monitoring

- (a) The Permittee shall record the pressure drop across each baghouse for the iron oxide storage bins shall be measured by a Pressure Differential Switch/ Pressure Gauge that gives the Permittee the capability to indicate both low-end and high-end set points and connects to a Programmable Logic Controller and an alarm system. The Permittee shall record the time and pressure drop across each baghouse for every instance that the alarm sounds. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps. 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition.
- (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 at least once every six (6) months.

D.1.8 Scrubbers Parametric Monitoring

- (a) The Permittee shall monitor the packed tower and venturi scrubber's makeup liquid flow rate for each of the packed tower and venturi scrubbers once per day when the hydrochloric acid production systems are in operation. When for any one reading, the flow rate is less than the normal minimum established during the latest stack test, the Permittee shall take reasonable response steps. A flow rate reading that is below the normal minimum is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition.
- (b) The pressure drop across each of the packed tower and venturi scrubbers shall be measured by a Pressure Differential Switch/Pressure Gauge that gives the Permittee the capability to indicate both low-end and high-end set points and connects to a Programmable Logic Controller and an alarm system. The Permittee shall record the time and pressure drop across each scrubber for every instance that the alarm sounds. When for any one reading, the pressure drop across the scrubber is outside the normal range of 12 to 20 inches, or the normal range established during the latest stack test, the Permittee shall take reasonable response steps. 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. Section C - Response to

Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition.

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 at least once every six (6) months.

D.1.9 Scrubbers Failure Detection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

In the event that scrubber failure has been observed, the failed scrubber 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).

D.1.10 Compliance Assurance Monitoring [40 CFR 64]

A Compliance Assurance Monitoring Plan is required for PM, PM₁₀ and PM_{2.5} emissions from the Scrubbers. A Compliance Assurance Monitoring Plan was submitted on July 12, 2004.

(a) Compliance assurance monitoring for the two (2) venturi separator/scrubbers controlling particulate emissions from the two (2) hydrochloric acid production systems:

(A) Inspections and Maintenance

- (i) The Permittee shall perform manufacturer recommended maintenance at recommended intervals on recirculation pumps, discharge pumps, and any other liquid pumps, in addition to exhaust system and scrubber fans and motors associated with those pumps and fans.
- (ii) The Permittee shall clean scrubber internals and mist eliminators at intervals sufficient to prevent buildup of any solids.
- (iii) Quarterly inspections shall be performed of each scrubber and mist eliminator.
- (iv) As required, or upon inspection, the Permittee shall clean or replace any plugged spray nozzles or other liquid delivery devices. Corrective action shall be taken within one (1) working day of detection.
- (v) As required, or upon inspection, the Permittee shall repair or replace missing or misaligned internal components. Corrective action shall be taken within one (1) working day of detection.
- (vi) As required, or upon inspection, the Permittee shall repair or replace mist eliminator elements, if needed.

(B) Testing

The Permittee shall perform PM, PM₁₀ and PM_{2.5} testing as required by the permit.

(C) Monitoring

- (i) The Permittee shall monitor the scrubber makeup liquid flow rate as required by Condition D.1.8.

- (ii) The Permittee shall monitor the pressure drop across the scrubber as required by Condition D.1.8.
 - (iii) The Permittee shall conduct visible emissions observations as required by Condition D.1.6.
- (2) One (1) baghouse for each of the four (4) iron oxide storage bins, exhausting through Stacks O-1 through O-4:
- (A) Inspections and Maintenance
 - (i) An inspection shall be performed each calendar quarter of all bags controlling the iron oxide storage bins when venting to the atmosphere. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.
 - (ii) When a bag failure is detected, the Permittee shall be required to comply with Conditions D.1.4(b) and D.1.5.
 - (B) Testing

The Permittee shall perform PM, PM₁₀ and PM_{2.5} testing as required by Condition D.1.5.
 - (C) Monitoring
 - (i) The Permittee shall monitor the pressure drop across the baghouses as required by Condition D.1.7.
 - (ii) The Permittee shall conduct visible emissions observations as required by Condition D.1.6.

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

D.1.11 Record Keeping Requirements

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- (a) To document the compliance status with Condition D.1.6 - Visible Emission Notation, the Permittee shall maintain a daily record of visible emission notations from the iron oxide storage bins stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (e.g. the process did not operate that day).
 - (b) To document the compliance status with Condition D.1.7 - Baghouse Parametric Monitoring, the Permittee shall maintain a daily record of the pressure drop across the iron oxide storage bins baghouses controlling the processes when venting to the atmosphere during normal operation when the alarm sounds. 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 compliance with Condition D.1.8 – Scrubbers Parametric Monitoring, the Permittee shall maintain the daily records of the pressure drop or flow rate reading across venturi scrubbers during normal operation when the alarm sounds. The Permittee shall include in its daily record when a pressure drop and flow rate reading are not taken and the reason for the lack of a pressure drop and flow rate readings, (e.g. the process did not operate that day).

- (d) To document compliance with Condition D.1.10 - Compliance Assurance Monitoring, the Permittee shall maintain records of the results of the inspections and maintenance procedures required under Condition D.1.10.

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

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Insignificant Activities

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million British thermal units per hour:

One (1) natural gas-fired boiler, identified as B-1, constructed in 2002, utilizing a normal firing method and ultra low-NO_x burners, with a maximum heat input rate of 8.0 million British thermal units per hour, and exhausting through a stack, identified as B-1.

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

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

D.2.1 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the PM emissions from the insignificant boiler, identified as B-1 shall not exceed 0.6 pounds per million Btu heat input (lb/MMBtu).

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) Process line no. 1, constructed in 1999:
 - (1) One (1) hydrochloric acid production system with a maximum processing rate of 15 tons per hour of ferrous chloride solution. This system consists of one (1) natural gas-fired spray roaster, identified as R-1, utilizing a tangential firing method and low-NO_x burners, with a maximum heat input rate of 39.6 million British thermal units per hour; one (1) venturi separator/scrubber which controls particulate emissions; one (1) absorber; and two (2) packed tower scrubbers in series and a mist eliminator for HCl control. This system exhausts through a stack, identified as S-1. Under NESHAP Subpart CCC, this is a hydrochloric acid recovery system.
- (b) Process line no. 2, constructed in 1999:
 - (2) One (1) hydrochloric acid production system with a maximum processing rate of 15 tons per hour of ferrous chloride solution. This system consists of one (1) natural gas-fired spray roaster, identified as R-2, utilizing a tangential firing method and low-NO_x burners, with a maximum heat input rate of 39.6 million British thermal units per hour; one (1) venturi separator/scrubber which controls particulate emissions; one (1) absorber; and two (2) packed tower scrubbers in series and a mist eliminator for HCl control. This system exhausts through a stack, identified as S-2. Under NESHAP Subpart CCC, this is a hydrochloric acid recovery system.
- (c) One (1) chlorination system, constructed in 2002, with a maximum chlorine usage of 900 pounds per hour. This system consists of one (1) chlorinator, identified as C-1, attached to a chlorination scrubber for HCl and chlorine emissions control, and exhausting through a stack, identified as C-1.
- (d) One (1) tank farm, identified as TS-1, each tank constructed in June 1998, consisting of fifteen (15) 50,000 gallon storage tanks for product hydrochloric acid, or ferrous chloride solution, identified as T-1 through T-9 and T-11 through T-16, and one (1) 35,000 gallon storage tank for virgin hydrochloric acid, identified as T-10. Each of these tanks is attached to a common fume scrubber to control vapor loss and exhaust to a common stack, identified as TS. Under NESHAP Subpart CCC, these are hydrochloric acid storage vessels.

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

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

- (a) The Permittee shall comply with the provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the emission units described in this section except when otherwise specified in 40 CFR 63, Subpart CCC.

- (b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

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

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

Pursuant to 40 CFR 63, Subpart CCC, the Permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants for Steel Pickling - HCl Process Facilities and Hydrochloric Acid Production Plants which are incorporated by reference as 326 IAC 20-29 for these emission units as specified as follows:

- (1) 40 CFR 63.1155 (a)-(c)
- (2) 40 CFR 63.1156
- (3) 40 CFR 63.1157(b)
- (4) 40 CFR 63.1159(a)-(b)
- (5) 40 CFR 63.1160(a)-(b)
- (6) 40 CFR 63.1161(a)-(d)
- (7) 40 CFR 63.1162(a)-(c)
- (8) 40 CFR 63.1163(a)-(e)
- (9) 40 CFR 63.1164(a)-(c)
- (10) 40 CFR 63.1165(a)-(c)
- (11) 40 CFR 63.1166 (a)-(c)
- (12) Applicable portions of Tables 1- Subpart 40 CFR 63, Subpart CCC

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

Source Name: American Iron Oxide Company
Source Address: 2001 E CR 700 North, Grandview, Indiana 47615
Part 70 Permit No.: T147-29980-00050

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

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify)
- Report (specify)
- Notification (specify)
- Affidavit (specify)
- Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

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

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: American Iron Oxide Company
Source Address: 2001 E CR 700 North, Grandview, Indiana 47615
Part 70 Permit No.: T147-29980-00050

This form consists of 2 pages

Page 1 of 2

| |
|--|
| <input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none">• The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and• The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16. |
|--|

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

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

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE AND ENFORCEMENT BRANCH
 PART 70 OPERATING PERMIT
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: American Iron Oxide Company
 Source Address: 2001 E CR 700 North, Grandview, Indiana 47615
 Part 70 Permit No.: T147-29980-00050

Months: _____ **to** _____ **Year:** _____

| | |
|--|-------------------------------|
| <p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p> | |
| <input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD. | |
| <input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD | |
| Permit Requirement (specify permit condition #) | |
| Date of Deviation: | Duration of Deviation: |
| Number of Deviations: | |
| Probable Cause of Deviation: | |
| Response Steps Taken: | |
| Permit Requirement (specify permit condition #) | |
| Date of Deviation: | Duration of Deviation: |
| Number of Deviations: | |
| Probable Cause of Deviation: | |
| Response Steps Taken: | |

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

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

Attachment B

| | |
|----------------------------|---|
| Source Name: | American Iron Oxide Company |
| Source Location: | 2001 E CR 700 North, Grandview, IN 47615 |
| County: | Spencer |
| SIC Code: | 2819 |
| Permit Renewal No.: | T147-29980-00050 |
| Permit Reviewer: | Josiah Balogun |

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

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

§ 63.1155 Applicability.

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

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

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

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

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

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

§ 63.1156 Definitions.

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

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

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

Closed-vent system means a system that is not open to the atmosphere and that is composed of piping, ductwork, connections, and, if necessary, flow-inducing devices that transport emissions from a process unit or piece of equipment (e.g., pumps, pressure relief devices, sampling connections, open-ended valves or lines, connectors, and

instrumentation systems) back into a closed system or into any device that is capable of reducing or collecting emissions.

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

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

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

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

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

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

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

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

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

§ 63.1157 Emission standards for existing sources.

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

(1) Any gases that contain HCl in a concentration in excess of 18 parts per million by volume (ppmv); or

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

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

(2) In addition to the requirement of paragraph (b)(1) of this section, no owner or operator of an existing affected plant shall cause or allow to be discharged into the atmosphere from the affected plant any gases that contain chlorine (Cl₂) in a concentration in excess of either 6 ppmv or an alternative source-specific maximum concentration. The source-specific maximum concentration standard shall be established according to §63.1161(c)(2) of this subpart.

§ 63.1158 Emission standards for new or reconstructed sources.

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

- (i) Any gases that contain HCl in a concentration in excess of 6 ppmv; or
- (ii) HCl at a mass emission rate that corresponds to a collection efficiency of less than 99 percent.

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

- (i) Any gases that contain HCl in a concentration in excess of 18 ppmv; or
- (ii) HCl at a mass emission rate that corresponds to a collection efficiency of less than 97 percent.

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

(2) In addition to the requirement of paragraph (b)(1) of this section, no owner or operator of a new or reconstructed affected plant shall cause or allow to be discharged into the atmosphere from the affected plant any gases that contain Cl₂ in a concentration in excess of 6 ppmv.

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

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

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

§ 63.1160 Compliance dates and maintenance requirements.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

§ 63.1161 Performance testing and test methods.

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

(1) Following approval of the site-specific test plan, the owner or operator shall conduct a performance test for each process or control device to either measure simultaneously the mass flows of HCl at the inlet and the outlet of the control device (to determine compliance with the applicable collection efficiency standard) or measure the concentration of HCl (and Cl₂ for hydrochloric acid regeneration plants) in gases exiting the process or the emission control device (to determine compliance with the applicable emission concentration standard).

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

(3) Compliance is achieved if either the average collection efficiency as determined by the HCl mass flows at the control device inlet and outlet is greater than or equal to the applicable collection efficiency standard, or the average measured concentration of HCl or Cl₂ exiting the process or the emission control device is less than or equal to the applicable emission concentration standard.

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

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

(2) During this performance test, the owner or operator of an existing affected plant may establish an alternative concentration standard if the owner or operator can demonstrate to the Administrator's satisfaction that the plant cannot meet a concentration limitation for Cl₂ of 6 ppmv when operated within its design parameters. The alternative concentration standard shall be established through performance testing while the plant is operated at maximum design temperature and with the minimum proportion of excess air that allows production of iron oxide of acceptable

quality while measuring the Cl_2 concentration in the process exhaust gas. The measured concentration shall be the concentration standard for that plant.

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

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

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

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

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

(v) Method 26A, "Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources—Isokinetic Method," to determine the HCl mass flows at the inlet and outlet of a control device or the concentration of HCl discharged to the atmosphere, and also to determine the concentration of Cl_2 discharged to the atmosphere from acid regeneration plants. If compliance with a collection efficiency standard is being demonstrated, inlet and outlet measurements shall be performed simultaneously. The minimum sampling time for each run shall be 60 minutes and the minimum sample volume 0.85 dry standard cubic meters (30 dry standard cubic feet). The concentrations of HCl and Cl_2 shall be calculated for each run as follows:

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

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

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

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

§ 63.1162 Monitoring requirements.

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

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

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

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

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

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

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

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

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

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

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

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

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

§ 63.1163 Notification requirements.

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

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

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

(3) As required by §63.9(b)(3) of subpart A of this part, the owner or operator of a new or reconstructed affected source, or a source that has been reconstructed such that it is an affected source, that has an initial startup after the effective date and for which an application for approval of construction or reconstruction is not required under

§63.5(d) of subpart A of this part, shall notify the Administrator in writing that the source is subject to the standards no later than 120 days after initial startup. The notification shall contain the information specified in §§63.9(b)(2)(i) through 63.9(b)(2)(v) of subpart A of this part, delivered or postmarked with the notification required in §63.9(b)(5) of subpart A of this part.

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

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

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

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

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

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

§ 63.1164 Reporting requirements.

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

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

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

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

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

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

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

§ 63.1165 Recordkeeping requirements.

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

- (1) The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);
- (2) The occurrence and duration of each malfunction of the air pollution control equipment;
- (3) All maintenance performed on the air pollution control equipment;
- (4) Actions taken during periods of startup, shutdown, and malfunction and the dates of such actions (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when these actions are different from the procedures specified in the startup, shutdown, and malfunction plan;
- (5) All information necessary to demonstrate conformance with the startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. This information can be recorded in a checklist or similar form (see §63.10(b)(2)(v) of subpart A of this part);
- (6) All required measurements needed to demonstrate compliance with the standard and to support data that the source is required to report, including, but not limited to, performance test measurements (including initial and any subsequent performance tests) and measurements as may be necessary to determine the conditions of the initial test or subsequent tests;
- (7) All results of initial or subsequent performance tests;
- (8) If the owner or operator has been granted a waiver from recordkeeping or reporting requirements under §63.10(f) of subpart A of this part, any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements;

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

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

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

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

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

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

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

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

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

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

§ 63.1166 Implementation and enforcement.

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

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

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

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

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

(3) Approval of any alternative measurement methods for HCl and CL₂ to those specified in §63.1161(d)(1).

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

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

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

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

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

[68 FR 37356, June 23, 2003]

§§ 63.1167-63.1174 [Reserved]

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

| Reference | Applies to Subpart CCC | Explanation |
|-------------------|------------------------|---|
| 63.1–63.5 | Yes. | |
| 63.6 (a)–(g) | Yes. | |
| 63.6 (h) | No | Subpart CCC does not contain an opacity or visible emission standard. |
| 63.6 (i)–(j) | Yes. | |
| 63.7–63.9 | Yes. | |
| 63.10 (a)–(c) | Yes. | |
| 63.10 (d) (1)–(2) | Yes. | |
| 63.10 (d)(3) | No | Subpart CCC does not contain an opacity or visible emission standard. |
| 63.10 (d) (4)–(5) | Yes. | |
| 63.10 (e)–(f) | Yes. | |
| 63.11 | No | Subpart CCC does not require the use of flares. |
| 63.12–63.15 | Yes | |

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

Source Background and Description

| | |
|----------------------------|---|
| Source Name: | American Iron Oxide Company |
| Source Location: | 2001 E CR 700 North, Grandview, IN 47615 |
| County: | Spencer |
| SIC Code: | 2819 |
| Permit Renewal No.: | T147-29980-00050 |
| Permit Reviewer: | Josiah Balogun |

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from American Iron Oxide Company relating to the operation of an iron oxide and hydrochloric acid production. On December 7, 2010, American Iron Oxide Company submitted an application to the OAQ requesting to renew its operating permit. American Iron Oxide Company was issued its first Part 70 Operating Permit T147-16252-00050 on September 5, 2006.

Source Definition

This Source Definition from the Part 70 Operating Permit Renewal was incorporated into this permit as follows:

American Iron Oxide Company (AMROX) operates an iron oxide and hydrochloric acid production plant next to the AK Steel plant. AMROX and AK Steel have a contractual relationship to address the ferrous chloride generated by AK Steel. The AMROX plant takes in all of the steel plant's ferrous chloride. IDEM, OAQ has examined whether these two plants are part of the same major source. The term "major source" is defined at 326 IAC 2-7-1(22). In order for the two plants to be considered one major source they must meet all three of the following criteria:

- (1) the plants must be under common ownership or common control;
- (2) the plants must have the same two-digit Standard Industrial Classification (SIC) Code or one must serve as a support facility for the other; and,
- (3) the plants must be located on contiguous or adjacent properties.

The plants are owned by different companies. AMROX is a joint venture partnership between International Steel Services Inc. and Marubeni Corporation. AK Steel is not a partner and owns no shares in AMROX or in any of the companies that form the AMROX joint venture partnership. Therefore no common ownership exists.

IDEM's Nonrule Policy Document Air-005 sets out two independent tests to determine if common control exists. The first test, the auxiliary activity test, determines whether one source performs an auxiliary activity which directly serves the purpose of a primary activity and whether the owner or operator of the primary activity has a major role in the day-to-day operations of the auxiliary activity. An auxiliary activity directly serves the purpose of a primary activity by supplying a necessary raw material to the primary activity or performing an integral part of the production process for the primary activity.

Day-to-day control of the auxiliary activity by the primary activity may be evidenced by several factors, including:

- is a majority of the output of the auxiliary activity provided to the primary activity?
- can the auxiliary activity contract to provide its products/services to a third-party without the consent of the primary activity?
- can the primary activity assume control of the auxiliary activity under certain circumstances?
- is the auxiliary activity required to submit periodic reports to the primary activity?

If one or a combination of these questions is answered affirmatively, common control may exist.

The AK Steel plant produces ferrous chloride during the production of steel. AK Steel must properly dispose of the ferrous chloride as part of its manufacturing process. The AK Steel plant sends 100% of its ferrous chloride to AMROX through a dedicated pipeline. AMROX's acceptance of this by-product directly serves AK Steel's primary activity of making steel. AMROX converts the ferrous chloride into iron oxide and hydrochloric acid. The AMROX plant returns the hydrochloric acid it generates to the AK Steel plant. For every gallon of ferrous chloride that it receives from AK Steel, AMROX returns a gallon of hydrochloric acid to AK Steel. AK Steel uses the hydrochloric acid in its production process. AMROX sells the iron oxide produced on the open market.

AMROX's output, its work, is taking ferrous chloride from steel mills and converting it into hydrochloric acid and iron oxide. A majority of the AMROX plant's work was done for the AK Steel plant up until July 2011. From January through August 2011, the AMROX plant developed additional customers and experienced increased shipments of ferrous chloride from other existing customers. This trend continued steadily to the point that the ferrous chloride from the AK Steel plant fell below 45% of the total amount of ferrous chloride the AMROX plant received, in both July and August 2011. During the same time period, AMROX's return of hydrochloric acid to AK Steel also decreased, falling below 45% of its total amount of hydrochloric acid shipped in July and August 2011.

AMROX also states that it contracts to provide its services to other steel mills without AK Steel's consent, that AK Steel cannot assume control of AMROX under any circumstance and that AMROX is not required to submit any periodic reports to AK Steel. IDEM finds that the AMROX plant performs an auxiliary activity for the AK Steel plant by taking its ferrous chloride, and that this removal of ferrous chloride is an integral part of the steel production process. However, since the AMROX plant does not provide a majority of its output to the AK Steel plant, and there are no other indications that AK Steel can exercise control over the AMROX plant, IDEM finds that the AK Steel plant does not have a major role in the day to day operation of the AMROX plant. Therefore the first common control test is not met.

The second common control test in the nonrule policy is the but/for test. This test focuses on whether the auxiliary activity would exist absent the needs of the primary activity. If all or a majority of the output of the auxiliary activity is consumed by the primary activity the but/for test is satisfied. If the AK Steel plant were to close, the AMROX plant would lose less than 45% of its work. The AMROX plant would still have a majority of its current customer base. AMROX has shown that it is economical for it to bring ferrous chloride to its plant from other steel mills, even with increased transportation costs. Therefore the second common control test is also not met. IDEM finds that the AMROX plant and the AK Steel plant are not under common control. Therefore, the first element of the major source definition is not met.

The next element of the major source definition is whether the two sources have the same two-digit SIC Code or is one serves as a support facility for the other. The SIC Code Manual of 1987 sets out how to determine the proper SIC Code for each type of industry. The principal product of each plant usually determines its SIC Code. The AMROX plant's principal products are two chemicals, iron oxide and hydrochloric acid. It has the two-digit SIC Code of 28 for the major group Chemicals and Allied Products. The AK Steel plant has the two-digit SIC Code 33, for the major group Primary Metal Industries. The two plants do not have the same two-digit SIC Code.

A plant is considered a support facility if at least 50% of its output is dedicated to the other plant. The AMROX plant provides less than 50% of its work, processing ferrous chloride into iron oxide and hydrochloric acid, to the AK Steel plant. AMROX is a not support facility to the AK Steel plant. Therefore, the second element of the major source definition is not met.

The two plants are located next to each other on contiguous properties, with direct physical connections through dedicated pipelines. Since the two plants are on contiguous properties they meet the third element of the major source definition. The two plants do not meet all three of the elements of the major source definition and IDEM, OAQ finds that AMROX and AK Steel are not part of the same major source.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

- (a) Process line no. 1, constructed in 1999:
 - (1) One (1) hydrochloric acid production system with a maximum processing rate of 15 tons per hour of ferrous chloride solution. This system consists of one (1) natural gas-fired spray roaster, identified as R-1, utilizing a tangential firing method and low-NO_x burners, with a maximum heat input rate of 39.6 million British thermal units per hour; one (1) venturi separator/scrubber which controls particulate emissions; one (1) absorber; and two (2) packed tower scrubbers in series and a mist eliminator for HCl recovery. This system exhausts through a stack, identified as S-1. Under NESHAP Subpart CCC, this is a hydrochloric acid recovery system.
 - (2) Two (2) iron oxide storage bins, identified as O-1 and O-2, with a storage capacity of 100 tons, each, and a maximum throughput rate of 1.0 ton of iron oxide/nickel ferrite per hour, total, each attached to an individual baghouse for particulate control, and exhausting through individual stacks, identified as O-1 and O-2, respectively.
- (b) Process line no. 2, constructed in 1999:
 - (1) One (1) hydrochloric acid production system with a maximum processing rate of 15 tons per hour of ferrous chloride solution. This system consists of one (1) natural gas-fired spray roaster, identified as R-2, utilizing a tangential firing method and low-NO_x burners, with a maximum heat input rate of 39.6 million British thermal units per hour; one (1) venturi separator/scrubber which controls particulate emissions; one (1) absorber; and two (2) packed tower scrubbers in series and a mist eliminator for HCl recovery. This system exhausts through a stack, identified as S-2. Under NESHAP Subpart CCC, this is a hydrochloric acid recovery system.
 - (2) Two (2) iron oxide storage bins, identified as O-3 and O-4, with a storage capacity of 100 tons, each, and a maximum throughput rate of 1.0 ton of iron oxide/nickel ferrite per hour, total, each attached to an individual baghouse for particulate control, and exhausting through individual stacks, identified as O-3 and O-4, respectively.
- (c) One (1) chlorination system, constructed in 2002, with a maximum chlorine usage of 900 pounds per hour. This system consists of one (1) chlorinator, identified as C-1, attached to a chlorination scrubber for HCl and chlorine emissions control, and exhausting through a stack, identified as C-1.

- (d) One (1) solvent extraction system, identified as TV-1, constructed in 1999, exhausting through a stack identified as TV-1. This system includes one (1) 40,000 gallon octanol storage tank, identified as T-17.
- (e) One (1) tank farm, identified as TS-1, each tank constructed in June 1998, consisting of fifteen (15) 50,000 gallon storage tanks for product hydrochloric acid, or ferrous chloride solution, identified as T-1 through T-9 and T-11 through T-16, and one (1) 35,000 gallon storage tank for virgin hydrochloric acid, identified as T-10. Each of these tanks is attached to a common fume scrubber to control vapor loss and exhaust to a common stack, identified as TS. Under NESHAP Subpart CCC, these are hydrochloric acid storage vessels.

Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit

There are no unpermitted facilities operating at this source during this review process.

Emission Units and Pollution Control Equipment Removed From the Source

No equipment has been removed from this facility during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21).

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million British thermal units per hour:

One (1) natural gas-fired boiler, identified as B-1, constructed in 2002, utilizing a normal firing method and ultra low-NO_x burners, with a maximum heat input rate of 8.0 million British thermal units per hour, and exhausting through a stack, identified as B-1.
- (b) Paved and unpaved roads and parking lots with public access.
- (c) Solvent recycling systems with batch capacity less than or equal to 100 gallons.

Existing Approvals

Since the issuance of the Part 70 Operating Permit 147-16252-00050 on September 5, 2006, the source has not been granted any other approval.

Enforcement Issue

IDEM is aware that the process line No. 1 is not in compliance with the following emission limitation:

Notice of Violation, Case No. 2002-11216-A

- (1) Pursuant to Condition D.1.1 of CP 147-9798-00050, issued on December 30, 1998, chlorine emissions from process line No. 1 shall be limited to 0.31 pound per hour. Based on a stack test conducted on April 10 and 11, 2001, the measured chlorine emission rate was 2.74 pounds per hour.
- (2) Pursuant to Condition D.1.7 of CP 147-9798-00050, issued on December 30, 1998, nitrogen oxides (NO_x) emissions from the roaster at process line No. 1 shall be limited to 0.08 pound per million British thermal units. Based on a stack

test conducted on April 10 and 11, 2001, the measured NO_x emission rate was 0.13 pound per million British thermal units.

- (3) Pursuant to 326 IAC 2-7-3, no Part 70 source may operate after that time that it is required to submit a timely and complete application, except in compliance with a Part 70 permit issued under that rule. A source can continue to operate without being in violation of this rule if it submits a timely and complete application. This source operated without submitting a timely and complete Part 70 permit application, a violation of 326 IAC 2-7-3.
- (4) Pursuant to 326 IAC 2-7-4, a timely Part 70 application is one that is received within twelve (12) months after the source becomes subject to the Part 70 permit program. For applicable sources in existence on December 14, 1995, the deadline is December 13, 1996. For other sources, the deadline is twelve (12) months from the date the source first meets an applicability criterion of section 2 of 326 IAC 2-7. This source failed to submit a timely application, a violation of 326 IAC 2-7-4.

Upon the conclusion of enforcement, IDEM will reopen this permit to include any compliance schedule developed in the resolution of the litigation.

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|------------------------------|
| Emission Calculations |
|------------------------------|

See Appendix A of this document for detailed emission calculations.

| |
|---------------------------------|
| County Attainment Status |
|---------------------------------|

The source is located in Spencer County.

| Pollutant | Designation |
|--|--|
| SO ₂ | Better than national standards. |
| CO | Unclassifiable or attainment effective November 15, 1990. |
| O ₃ | Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. ¹ |
| PM ₁₀ | Unclassifiable effective November 15, 1990. |
| NO ₂ | Cannot be classified or better than national standards. |
| PM _{2.5} | Attainment effective November 2, 2011, for the annual PM2.5 standard for the Evansville area, including Ohio Township of Spencer County. |
| Pb | Not designated. |
| ¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. | |

- (a) **Ozone Standards**
 Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Spencer County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (b) **PM_{2.5}**
 Spencer County has been classified as attainment for PM_{2.5}. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct PM_{2.5} significant level at ten (10) tons per year. This rule became effective, June 28, 2011.. Therefore, direct PM_{2.5} and SO₂ 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 all criteria pollutants. 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 an iron oxide and hydrochloric acid production source, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7. Therefore, fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

| Unrestricted Potential Emissions | |
|----------------------------------|-----------|
| Pollutant | Tons/year |
| PM | 621 |
| PM ₁₀ | 618 |
| PM _{2.5} | 618 |
| SO ₂ | 0.20 |
| VOC | 2.20 |
| CO | 32.10 |
| NO _x | 38.10 |
| GHGs as CO ₂ e | 46,110.00 |
| Single HAP | > 10 |
| Total HAP | > 25 |

| HAPs | tons/year |
|-------------------|----------------|
| Hydrochloric Acid | 105 |
| Chromium | 8.02 |
| Nickel | 0.224 |
| Total | > 25 |

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM₁₀ and PM_{2.5} are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7 and will be issued a Part 70 Operating Permit Renewal.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of GHGs is less than one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per year.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

Actual Emissions

The following table shows the actual emissions as reported by the source. This information reflects the 2010 OAQ emission data.

| Pollutant | Actual Emissions (tons/year) |
|-------------------|-------------------------------------|
| PM | --- |
| PM ₁₀ | 2 |
| PM _{2.5} | 1 |
| SO ₂ | 0 |
| VOC | 1 |
| CO | 3 |
| NO _x | 10 |
| Ammonia | --- |
| lead | 0 |

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, because the source met the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any new control equipment is considered federally enforceable only after issuance of this Part 70 permit renewal, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

| Process/ Emission Unit | Potential To Emit of the Entire Source After Issuance of Renewal (tons/year) | | | | | | | | | |
|---------------------------------------|--|------------------|-------------------|-----------------|------------|--------------|-----------------|---------------------------------|----------------|------------------------|
| | PM | PM ₁₀ | PM _{2.5} | SO ₂ | VOC | CO | NO _x | GHGs as CO ₂ e | Total HAPs | Worst Single HAP |
| Roaster R-1 | 75.0 | 75.0 | 75.0 | 0 | 0 | 0 | 0 | 0 | > 25 | > 10 |
| Roaster R-2 | | | | 0 | 0 | 0 | 0 | 0 | | |
| Burner emissions for Roaster R-1 | 0.3 | 1.3 | 1.3 | 0.1 | 1 | 14.6 | 17.3 | 20,940 | 0.33 | 0.31 |
| Burner emissions for Roaster R-2 | 0.3 | 1.3 | 1.3 | 0.1 | 1 | 14.6 | 17.3 | 20,940 | 0.33 | 0.31 |
| Iron Oxide Bins (O-1 through O-4) | 17.5 | 17.5 | 17.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Boiler (B-1) | 0.1 | 0.3 | 0.3 | 0 | 0.2 | 2.9 | 3.5 | 4,230 | 0.07 | 0.063 |
| Chlorination System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | > 25 | > 10 |
| Tank Farm (TS-1) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Unpaved Road | 6.74 | 1.4 | 1.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total PTE of Entire Source | 99.94 | 96.80 | 96.80 | 0.2 | 2.2 | 32.10 | 38.10 | 46,110 | > 25 | > 10 |
| Title V Major Source Thresholds | NA | 100 | 100 | 100 | 100 | 100 | 100 | 100,000 CO ₂ e | 25 | 10 |
| PSD Major Source Thresholds | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100,000 CO ₂ e | NA | NA |

This existing stationary source is not major for PSD because the emissions of each regulated pollutant, excluding GHGs, are less than one hundred (<100) tons per year, emissions of GHGs are less than one hundred thousand (<100,000) tons of CO₂ equivalent emissions (CO₂e) per year, and it is in one of the twenty-eight (28) listed source categories.

Federal Rule Applicability

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each existing pollutant-specific emission unit that meets the following criteria:
- (1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
 - (2) is subject to an emission limitation or standard for that pollutant; and
 - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each existing emission unit and specified pollutant subject to CAM:

| Emission Unit / Pollutant | Control Device Used | Emission Limitation (Y/N) | Uncontrolled PTE (tons/year) | Controlled PTE (tons/year) | Major Source Threshold (tons/year) | CAM Applicable (Y/N) | Large Unit (Y/N) |
|----------------------------------|---------------------|---------------------------|------------------------------|----------------------------|------------------------------------|----------------------|------------------|
| Roaster R-1 (PM) | Y | Y | 274 | 3.29 | 100 | Y | N |
| Roaster R-1 (PM ₁₀) | Y | Y | 274 | 3.29 | 100 | Y | N |
| Roaster R-1 (PM _{2.5}) | Y | Y | 274 | 3.29 | 100 | Y | N |
| Roaster R-2 (PM) | Y | Y | 274 | 3.29 | 100 | Y | N |
| Roaster R-2 (PM ₁₀) | Y | Y | 274 | 3.29 | 100 | Y | N |
| Roaster R-2 (PM _{2.5}) | Y | Y | 274 | 3.29 | 100 | Y | N |
| Roaster R-1 (HCl) | Y | N | Single >10 Total > 25 | Single <10 Total < 25 | 10/25 | N | N |
| Roaster R-1 (HCl) | Y | N | Single >10 Total > 25 | Single <10 Total < 25 | 10/25 | N | N |

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to Roaster R-1 and Roaster R-1 for PM, PM₁₀ and PM_{2.5} upon issuance of the Title V Renewal. A CAM plan has been incorporated into this Part 70 permit renewal.

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.
- (c) The one (1) boiler, rated at 8.0 million British thermal units per hour is not subject to the New Source Performance Standards, 326 IAC 12, 40 CFR 60.40c, Subparts Dc, because it was installed after June 9, 1989, and has a capacity less than 10 million British thermal units per hour.
- (d) The storage tanks at this source were all constructed in 1998 and 1999 and do not contain volatile organic liquids. Therefore, the requirements of the NSPS for 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, 326 IAC 12, (40 CFR Part 60.110b, Subpart Kb) are not applicable.
- (c) This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Steel Pickling—HCl Process Facilities and Hydrochloric Acid Regeneration Plants (40 CFR Part 63, Subpart CCC), which is incorporated by reference as 326 IAC 20-29. The provisions of this subpart apply to the following facilities and plants that are major sources for hazardous air pollutants (HAP) or are parts of facilities that are major sources for HAP. The emission units subject to this rule include the followings:
 - (A) Process line no. 1, constructed in 1999:
 - (1) One (1) hydrochloric acid production system with a maximum processing rate of 15 tons per hour of ferrous chloride solution. This system consists of one (1) natural gas-fired spray roaster, identified as R-1, utilizing a tangential firing method and low-NO_x burners, with a maximum heat

input rate of 39.6 million British thermal units per hour; one (1) venturi separator/scrubber which controls particulate emissions; one (1) absorber; and two (2) packed tower scrubbers in series and a mist eliminator for HCl control. This system exhausts through a stack, identified as S-1. Under NESHAP Subpart CCC, this is a hydrochloric acid recovery system.

- (B) Process line no. 2, constructed in 1999:
- (2) One (1) hydrochloric acid production system with a maximum processing rate of 15 tons per hour of ferrous chloride solution. This system consists of one (1) natural gas-fired spray roaster, identified as R-2, utilizing a tangential firing method and low-NO_x burners, with a maximum heat input rate of 39.6 million British thermal units per hour; one (1) venturi separator/scrubber which controls particulate emissions; one (1) absorber; and two (2) packed tower scrubbers in series and a mist eliminator for HCl control. This system exhausts through a stack, identified as S-2. Under NESHAP Subpart CCC, this is a hydrochloric acid recovery system.
- (C) One (1) chlorination system, constructed in 2002, with a maximum chlorine usage of 900 pounds per hour. This system consists of one (1) chlorinator, identified as C-1, attached to a chlorination scrubber for HCl and chlorine emissions control, and exhausting through a stack, identified as C-1.
- (D) One (1) tank farm, identified as TS-1, each tank constructed in June 1998, consisting of fifteen (15) 50,000 gallon storage tanks for product hydrochloric acid, or ferrous chloride solution, identified as T-1 through T-9 and T-11 through T-16, and one (1) 35,000 gallon storage tank for virgin hydrochloric acid, identified as T-10. Each of these tanks is attached to a common fume scrubber to control vapor loss and exhaust to a common stack, identified as TS. Under NESHAP Subpart CCC, these are hydrochloric acid storage vessels.

These emission units are subject to the following portions of Subpart CCC.

- (1) 40 CFR 63.1155 (a)-(c)
- (2) 40 CFR 63.1156
- (3) 40 CFR 63.1157(b)
- (4) 40 CFR 63.1159(a)-(b)
- (5) 40 CFR 63.1160(a)-(b)
- (6) 40 CFR 63.1161(a)-(d)
- (7) 40 CFR 63.1162(a)-(c)
- (8) 40 CFR 63.1163(a)-(c)
- (9) 40 CFR 63.1164(a)-(c)
- (10) 40 CFR 63.1165(a)-(c)
- (11) 40 CFR 63.1166 (a)-(c)
- (12) Applicable portions of Tables 1- Subpart 40 CFR 63, Subpart CCC

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

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant deterioration)

This source was constructed after August 1977, the applicability date for this rule and at that time it has the potential to emit PM, PM₁₀ and PM_{2.5} emissions greater than 100 tons per year, respectively. The source will limit the PTE of PM, PM₁₀ and PM_{2.5} to less than 100 tons per year, respectively. The source is one of the twenty-eight (28) listed sources categories. Therefore the source is not major for PSD purposes.

The emission units, (waste pickle liquor processing and the iron oxide/nickel ferrite) constructed in 1999 have uncontrolled PM, PM₁₀ and PM_{2.5} emissions of greater than 100 tons per year, each. Pursuant to the Part 70 Operating Permit No.147-16252-00050, issued on September 5, 2006, and revised by Part 70 operation permit number T147-29980-00050, the PM, PM₁₀ and PM_{2.5} emissions from the emission units, shall be limited to less than 100 tons per year:

- (a) The PM, PM₁₀ and PM_{2.5} emissions from the two (2) hydrochloric acid production systems exhaust stack shall be less than 17.1 pounds per hour, each.
- (b) The PM, PM₁₀ and PM_{2.5} emissions from the four (4) iron oxide storage bins, identified as O-1 through O-4 shall be less than 4.0 pounds per hour, each.

Compliance with the above limits in combination with the potential PM, PM₁₀ and PM_{2.5} emissions from other emission units, will limit the sourcewide PM, PM₁₀ and PM_{2.5}, emissions to less than 100 tons per year, respectively and render the requirements of 326 IAC 2-2 (PSD) not applicable to this source.

326 IAC 2-6 (Emission Reporting)

This source, not located in Lake, Porter, or LaPorte County, is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit pursuant to 326 IAC 2-7 (Part 70). The potential to emit of VOC and PM₁₀ is less than 250 tons per year; and the potential to emit of CO, NO_x, and SO₂ is less than 2,500 tons per year. Therefore, pursuant to 326 IAC 2-6-3(a)(2), triennial reporting is required. An emission statement shall be submitted in accordance with the compliance schedule in 326 IAC 2-6-3 by July 1, 2012, and every three (3) years thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 5-1 (Opacity Limitations)

This source is subject to the opacity limitations specified in 326 IAC 5-1-2(2)

326 IAC 6-4 (Fugitive Dust Emissions Limitations)

This rule requires the source 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 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of hydrochloric acid production system at Process line no. 1 and hydrochloric acid production system at Process line no. 2 will emit greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs, each. Therefore, 326 IAC 2-4.1 would apply to these units, however, pursuant to 326 IAC 2-4.1-1(b)(2), because these units are specifically regulated by NESHAP 40 CFR 63, Subpart CCC, which was issued pursuant to Section 112(d) of the CAA, these units are exempt from the requirements of 326 IAC 2-4.1.

State Rule Applicability – Individual Facilities

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)
Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating: Emission Limitations for facilities specified in 326 IAC 6-2-1(d)), the PM emissions from the insignificant boiler, identified as B-1 shall not exceed 0.6 pounds per million Btu heat input (lb/MMBtu). This limitation was calculated using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}} = 0.635 \text{ lbs/MMBtu}$$

Where:

Q = total source heat input capacity (MMBtu/hr).
For these units, Q = 8.0 MMBtu/hr.

Pursuant to 326 IAC 6-2-4(a), for Q less than 10 million British thermal units per hour, Pt shall not exceed 0.6 lbs/MMBtu.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the allowable particulate matter (PM) from the iron oxide and hydrochloric acid production system shall not exceed the following PM limits as specified below. The pound per hour limitation was calculated with the following equation:

- (a) Pursuant to 326 IAC 6-3-2, the particulate from the hydrochloric acid production system at Process line no. 1 shall not exceed 25.2 pounds per hour when operating at a process weight rate of 15 tons per hour.
- (b) Pursuant to 326 IAC 6-3-2, the particulate from the hydrochloric acid production system at Process line no. 2 shall not exceed 25.2 pounds per hour when operating at a process weight rate of 15 tons per hour.
- (c) Pursuant to 326 IAC 6-3-2, the particulate from each of the two (2) iron oxide storage bins at Process line no. 1 shall not exceed 4.10 pounds per hour when operating at a process weight rate of 1 ton per hour.
- (d) Pursuant to 326 IAC 6-3-2, the particulate from each of the two (2) iron oxide storage bins at Process line no. 2 shall not exceed 4.10 pounds per hour when operating at a process weight rate of 1 ton per hour.
- (e) All other manufacturing processes at this source have potential emissions less than five hundred fifty-one thousandths (0.551) pound per hour. Therefore, pursuant to 326 IAC 6-3-1(b)(14), these processes are exempt from the requirements of 326 IAC 6-3.

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

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

The venturi scrubbers and baghouse shall be in operation at all times the iron oxide and hydrochloric acid production system are in operation, in order to comply with this limit.

326 IAC 7-1.1 Sulfur Dioxide Emission Limitations

These emission units are not subject to requirements of 326 IAC 326 IAC 7-1.1 because the SO₂ PTE (or limited SO₂ PTE) are less than 25 tons per year or 10 pounds per hour.

326 IAC 8-1-6 (New facilities; General reduction requirements)

The uncontrolled VOC emissions from these sources are less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 are not applicable to any of the emission unit at this source.

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.

(a) The compliance determination requirements applicable to this source are as follows:

| Emission Unit | Control Device | Pollutant | Frequency of Testing | Limit or Requirements |
|--|------------------------------------|--------------------|----------------------|-------------------------------|
| Hydrochloric acid production system at Process line no. 1 or hydrochloric acid production system at Process line no. 2 | Venturi and Packed tower Scrubbers | PM, PM10 and PM2.5 | 5 years | 326 IAC 2-2 and 326 IAC 6-3-2 |
| one (1) of the four (4) iron oxide storage bins | Baghouse | PM, PM10 and PM2.5 | 5 years | 326 IAC 2-2 and 326 IAC 6-3-2 |

(b) The compliance monitoring requirements applicable to this source are as follows:

| Control | Parameter | Frequency | Range | Excursions and Exceedances |
|--|---------------------|-----------|--------------------|----------------------------|
| Iron oxide storage bins (Baghouse) | Water Pressure Drop | Daily | 2.0 to 10.0 inches | Response Steps |
| | Visible Emissions | | Normal-Abnormal | |
| Hydrochloric acid production systems (Venturi and Packed tower Scrubber) | Flow Rate | Daily | N/A | Response Steps |
| | Pressure Drop | | 12 to 20 inches | |

| Control | Parameter | Frequency | Range | Excursions and Exceedances |
|--|-------------------|-----------|-------|----------------------------|
| Hydrochloric acid production system and iron oxide storage bin stack | Visible Emissions | Daily | N/A | Response Steps |

Compliance Assurance Monitoring (CAM) Plan

40 CFR Part 64: A Compliance Assurance Monitoring Plan is required for PM, PM₁₀ and PM_{2.5} emissions from the scrubbers. A Compliance Assurance Monitoring Plan was submitted on July 12, 2004. The potential to emit PM, PM₁₀ and PM_{2.5} after controls are less than 100 tons per year from each unit. Therefore, these emission units are not considered large pollutant specific emission units.

- (1) Compliance assurance monitoring for the two (2) venturi separator/scrubbers controlling particulate emissions from the two (2) hydrochloric acid recovery systems:
 - (A) Inspections and Maintenance
 - (i) The Permittee shall perform manufacturer recommended maintenance at recommended intervals on recirculation pumps, discharge pumps, and any other liquid pumps, in addition to exhaust system and scrubber fans and motors associated with those pumps and fans.
 - (ii) The Permittee shall clean scrubber internals and mist eliminators at intervals sufficient to prevent buildup of any solids.
 - (iii) Quarterly inspections shall be performed of each scrubber and mist eliminator.
 - (iv) As required, or upon inspection, the Permittee shall clean or replace any plugged spray nozzles or other liquid delivery devices. Corrective action shall be taken within one (1) working day of detection.
 - (v) As required, or upon inspection, the Permittee shall repair or replace missing or misaligned internal components. Corrective action shall be taken within one (1) working day of detection.
 - (vi) As required, or upon inspection, the Permittee shall repair or replace mist eliminator elements, if needed.
 - (B) Testing

The Permittee shall perform PM, PM₁₀ and PM_{2.5} testing as required by the permit.
 - (C) Monitoring
 - (i) The Permittee shall monitor the scrubber makeup liquid flow rate as required by the permit.
 - (ii) The Permittee shall monitor the pressure drop across the scrubber as required by the permit.
 - (iii) The Permittee shall conduct visible emissions observations as required

by the permit.

- (2) One (1) baghouse for each of the four (4) iron oxide storage bins, exhausting through Stacks O-1 through O-4:
- (A) Inspections and Maintenance
- (i) An inspection shall be performed each calendar quarter of all bags controlling the iron oxide storage bins when venting to the atmosphere. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.
- (ii) When a bag failure is detected, the Permittee shall be required to comply with Conditions as specified in the permit.
- (B) Testing
- The Permittee shall perform PM, PM₁₀ and PM_{2.5} testing as required by the permit.
- (C) Monitoring
- (i) The Permittee shall monitor the pressure drop across the baghouses as required by the permit.
- (ii) The Permittee shall conduct visible emissions observations as required by the permit.

Recommendation

The staff recommends to the Commissioner that the Part 70 Operating Permit Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on December 7, 2010.

Conclusion

The operation of this an iron oxide and hydrochloric acid production shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. 147-29980-00050.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Josiah Balogun 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) 234-5257 or toll free at 1-800-451-6027 extension 4-5257.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Appendix A: Emissions Calculations

Emission Summary

Source Name: American Iron Oxide Company

Source Location: 2001 E CR 700 North, Grandview, IN 47615

Permit Number: T147-29980-00050

Permit Reviewer: Josiah Balogun

Date: 6-Jan-2012

Uncontrolled Potential to Emit

| | PM (tons/yr) | PM₁₀ (tons/yr) | PM_{2.5} (tons/yr) | SO₂ (tons/yr) | VOC (tons/yr) | CO (tons/yr) | NOx (tons/yr) | GHGs as CO₂e (tons/yr) | HAPs (tons/yr) |
|---|-------------------------|--------------------------------------|---------------------------------------|-------------------------------------|--------------------------|-------------------------|--------------------------|--|--|
| Emission Unit | | | | | | | | | |
| Roaster R-1 | 274 | 274 | 274 | 0 | 0 | 0 | 0 | 0 | 52.6 |
| Roaster R-2 | 274 | 274 | 274 | 0 | 0 | 0 | 0 | 0 | 52.6 |
| Burner emission for Roaster R-1 | 0.3 | 1.3 | 1.3 | 0.1 | 1 | 14.6 | 17.3 | 20,940 | 0.33 |
| Burner emission for Roaster R-2 | 0.3 | 1.3 | 1.3 | 0.1 | 1 | 14.6 | 17.3 | 20,940 | 0.33 |
| Iron Oxide Storage Bins (O-1 through O-4) | 65.5 | 65.5 | 65.5 | 0 | 0 | 0 | 0 | 0 | 0 |
| Boiler (B-1) | 0.1 | 0.3 | 0.3 | 0 | 0.2 | 2.9 | 3.5 | 4,230 | 0.07 |
| Chlorination System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | single |
| Tank Farm, TS-1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | HAP > 10 |
| Unpaved Road | 6.74 | 1.4 | 1.4 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Emissions | 620.94 | 617.80 | 617.80 | 0.20 | 2.20 | 32.10 | 38.10 | 46110.00 | Single HAP >10 Combined HAPs > 25 |

Appendix A: Emissions Calculations

Emission Summary

Source Name: American Iron Oxide Company
Source Location: 2001 E CR 700 North, Grandview, IN 47615
Permit Number: T147-29980-00050
Permit Reviewer: Josiah Balogun
Date: 6-Jan-2012

Limited Potential to Emit

| Emission Unit | PM (tons/yr) | PM₁₀ (tons/yr) | PM_{2.5} (tons/yr) | SO₂ (tons/yr) | VOC (tons/yr) | CO (tons/yr) | NOx (tons/yr) | GHGs as CO₂e (tons/yr) | HAPs (tons/yr) |
|---|-------------------------|--------------------------------------|---------------------------------------|-------------------------------------|--------------------------|-------------------------|--------------------------|--|--|
| Roaster R-1 | 75 | 75 | 75 | 0 | 0 | 0 | 0 | 0 | 52.6 |
| Roaster R-2 | | | | 0 | 0 | 0 | 0 | 0 | 52.6 |
| Burner emission for Roaster R-1 | 0.3 | 1.3 | 1.3 | 0.1 | 1 | 14.6 | 17.3 | 20,940 | 0.33 |
| Burner emission for Roaster R- 2 | 0.3 | 1.3 | 1.3 | 0.1 | 1 | 14.6 | 17.3 | 20,940 | 0.33 |
| Iron Oxide Storage Bins (O-1 through O-4) | 17.5 | 17.5 | 17.5 | 0 | 0 | 0 | 0 | 0 | 0 |
| Boiler (B-1) | 0.1 | 0.3 | 0.3 | 0 | 0.2 | 2.9 | 3.5 | 4,230 | 0.07 |
| Chlorination System | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | single HAP > 10 |
| Tank Farm, TS-1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Unpaved Road | 6.74 | 1.4 | 1.4 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Emissions | 99.9 | 96.80 | 96.80 | 0.20 | 2.20 | 32.10 | 38.10 | 46110.00 | Single HAP <10 Combined HAPs < 25 |

**Appendix A: Emission Calculations
Process Lines**

Company Name: American Iron Oxide Company
Address City IN Zip: 2001 E CR 700 North, Grandview, IN 47615
Permit Number: T147-29980-00050
Reviewer: Josiah Balogun
Date: 6-Jan-2012

| Process | PM/PM10 (lb/ton) | HCl (lb/ton) | Cl2 (lb/ton) | NOx (lb/MMBtu) | Maximum Capacity (tons/hr) | Maximum Capacity (MMBtu/hr) | Potential to emit after control | | | | PM/PM10 Control Efficiency | HCl Control Efficiency | Potential to emit before control | |
|---------------------|---------------------|-----------------|-----------------|-------------------|----------------------------------|-----------------------------------|---------------------------------|------------------|------------------|------------------|----------------------------------|------------------------------|----------------------------------|------------------|
| | | | | | | | PM/PM10 (tons/yr) | HCl (tons/yr) | Cl2 (tons/yr) | NOx (tons/yr) | | | PM/PM10 (tons/yr) | HCl (tons/yr) |
| Process Line 1 (R1) | 0.05 | 0.04 | 0.28 | 0.15 | 15 | 26.8 | 3.29 | 2.63 | 18.4 | 17.6 | 98.80% | 95.00% | 274 | 52.6 |
| Process Line 2 (R2) | 0.05 | 0.04 | 0.28 | 0.15 | 15 | 26.8 | 3.29 | 2.63 | 18.4 | 17.6 | 98.80% | 95.00% | 274 | 52.6 |
| Totals: | | | | | | | 6.57 | 5.26 | 36.8 | 35.2 | | | 548 | 105 |

All emission factors are based on the stack test conducted on 4/10 and 4/11/01 with a safety factor of 10% and rounded to the next one hundredth.
 All emission factors are after control by the two (2) scrubbers in series and the mist eliminator.

Nickel and Chromium

| Process | Weight % Cr2O3 | Weight % NiO | Potential to emit after control | | | Potential to emit before control | | |
|---------------------|-------------------|-----------------|---------------------------------|-----------------|--|----------------------------------|-----------------|--|
| | | | Cr (tons/yr) | Ni (tons/yr) | | Cr (tons/yr) | Ni (tons/yr) | |
| Process Line 1 (R1) | 1.46% | 0.04% | 0.048 | 0.001 | | 4.01 | 0.112 | |
| Process Line 2 (R2) | 1.46% | 0.04% | 0.048 | 0.001 | | 4.01 | 0.112 | |
| | | | 0.096 | 0.003 | | 8.02 | 0.224 | |

Chromium Emissions = PM/PM10 Emissions x Weight % Cr2O3
 Nickel Emissions = PM/PM10 Emissions x Weight % NiO
 Weight % provided by the applicant

**Appendix A: Emission Calculations
Iron Oxide Bins**

Company Name: American Iron Oxide Company
Address City IN Zip: 2001 E CR 700 North, Grandview, IN 47615
Permit Number: T147-29980-00050
Reviewer: Josiah Balogun
Date: 6-Jan-2012

| Unit ID | Control Efficiency (%) | Grain Loading per Dry Standard Cubic foot of Outlet Air (grains/cub. ft.) | Gas or Air Flow Rate (acfm.) | Actual Temperature (deg. F) | Volume % Moisture | PM Emission Rate before Controls (lb/hr) | PM Emission Rate before Controls (tons/yr) | PM Emission Rate after Controls (lb/hr) | PM Emission Rate after Controls (tons/yr) |
|-----------------------------------|------------------------|---|------------------------------|-----------------------------|-------------------|--|--|---|---|
| Iron Oxide Bins (O-1 through O-4) | 99.0% | 0.0140 | 2400 | 150 | 40% | 14.96 | 65.5 | 0.1496 | 0.655 |

Methodology

Emission Rate in lbs/hr (after controls) = (grains/dry standard cub. ft.) x ((cub. ft./min.) x ((460+standard temperature (68)) / (460 + actual temperature)) x ((100 - %moisture)/100) x (60 min/hr) x (lb/7000 grains)

Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Emission Rate in lbs/hr (before controls) = Emission Rate (after controls): (lbs/hr)/(1-control efficiency)

Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

PM = PM10

Note that each bin has its own baghouse, but only one bin can be filled at a time.

Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/HR <100

Company Name: American Iron Oxide Company
Address City IN Zip: 2001 E CR 700 North, Grandview, IN 47615
Permit Number: T147-29980-00050
Reviewer: Josiah Balogun
Date: 6-Jan-2012

| | | |
|---------------------------------|-----------------------|---------------------------------|
| Heat Input Capacity MMBtu/hr | HHV mmBtu mmscf | Potential Throughput MMCF/yr |
| 39.6 | 1000 | 346.9 |

| Emission Factor in lb/MMCF | Pollutant | | | | | | |
|-------------------------------|-----------|-------|---------------|-----|---------------------------|-----|------|
| | PM* | PM10* | direct PM2.5* | SO2 | NOx 100 **see below | VOC | CO |
| Potential Emission in tons/yr | 0.3 | 1.3 | 1.3 | 0.1 | 17.3 | 1.0 | 14.6 |

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
 PM2.5 emission factor is filterable and condensable PM2.5 combined.
 **Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
 MMBtu = 1,000,000 Btu
 MMCF = 1,000,000 Cubic Feet of Gas
 Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
 Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 6 for HAPs emissions calculations.

**Appendix A: Emissions Calculations
 Natural Gas Combustion Only
 MM BTU/HR <100
 HAPs Emissions**

Company Name: American Iron Oxide Company
Address City IN Zip: 2001 E CR 700 North, Grandview, IN 47615
Permit Number: T147-29980-00050
Reviewer: Josiah Balogun
Date: 6-Jan-2012

| HAPs - Organics | | | | | |
|-------------------------------|--------------------|----------------------------|-------------------------|-------------------|--------------------|
| Emission Factor in lb/MMcf | Benzene 2.1E-03 | Dichlorobenzene 1.2E-03 | Formaldehyde 7.5E-02 | Hexane 1.8E+00 | Toluene 3.4E-03 |
| Potential Emission in tons/yr | 3.642E-04 | 2.081E-04 | 1.301E-02 | 3.122E-01 | 5.897E-04 |

| HAPs - Metals | | | | | |
|-------------------------------|-----------------|--------------------|---------------------|----------------------|-------------------|
| Emission Factor in lb/MMcf | Lead 5.0E-04 | Cadmium 1.1E-03 | Chromium 1.4E-03 | Manganese 3.8E-04 | Nickel 2.1E-03 |
| Potential Emission in tons/yr | 8.672E-05 | 1.908E-04 | 2.428E-04 | 6.591E-05 | 3.642E-04 |

Methodology is the same as page 5.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

See Page 7 for Greenhouse Gas calculations.

Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/HR <100

Greenhouse Gas Emissions

Company Name: American Iron Oxide Company

Address City IN Zip: 2001 E CR 700 North, Grandview, IN 47615

Permit Number: T147-29980-00050

Reviewer: Josiah Balogun

Date: 6-Jan-2012

| | Greenhouse Gas | | |
|---------------------------------------|----------------|-----|-----|
| | CO2 | CH4 | N2O |
| Emission Factor in lb/MMcf | 120,000 | 2.3 | 2.2 |
| Potential Emission in tons/yr | 20,814 | 0.4 | 0.4 |
| Summed Potential Emissions in tons/yr | 20,815 | | |
| CO2e Total in tons/yr | 20,940 | | |

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100**

Company Name: American Iron Oxide Company
Address City IN Zip: 2001 E CR 700 North, Grandview, IN 47615
Permit Number: T147-29980-00050
Reviewer: Josiah Balogun
Date: 6-Jan-2012

| | | |
|---------------------------------|-----------------------|---------------------------------|
| Heat Input Capacity MMBtu/hr | HHV mmBtu mmscf | Potential Throughput MMCF/yr |
| 39.6 | 1000 | 346.9 |

| Emission Factor in lb/MMCF | Pollutant | | | | | | |
|-------------------------------|-----------|-------|---------------|-----|--------------------|-----|------|
| | PM* | PM10* | direct PM2.5* | SO2 | NOx | VOC | CO |
| | 1.9 | 7.6 | 7.6 | 0.6 | 100 **see below | 5.5 | 84 |
| Potential Emission in tons/yr | 0.3 | 1.3 | 1.3 | 0.1 | 17.3 | 1.0 | 14.6 |

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

PM2.5 emission factor is filterable and condensable PM2.5 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 9 for HAPs emissions calculations.

**Appendix A: Emissions Calculations
 Natural Gas Combustion Only
 MM BTU/HR <100
 HAPs Emissions**

Company Name: American Iron Oxide Company
Address City IN Zip: 2001 E CR 700 North, Grandview, IN 47615
Permit Number: T147-29980-00050
Reviewer: Josiah Balogun
Date: 6-Jan-2012

| HAPs - Organics | | | | | |
|-------------------------------|--------------------|----------------------------|-------------------------|-------------------|--------------------|
| Emission Factor in lb/MMcf | Benzene 2.1E-03 | Dichlorobenzene 1.2E-03 | Formaldehyde 7.5E-02 | Hexane 1.8E+00 | Toluene 3.4E-03 |
| Potential Emission in tons/yr | 3.642E-04 | 2.081E-04 | 1.301E-02 | 3.122E-01 | 5.897E-04 |

| HAPs - Metals | | | | | |
|-------------------------------|-----------------|--------------------|---------------------|----------------------|-------------------|
| Emission Factor in lb/MMcf | Lead 5.0E-04 | Cadmium 1.1E-03 | Chromium 1.4E-03 | Manganese 3.8E-04 | Nickel 2.1E-03 |
| Potential Emission in tons/yr | 8.672E-05 | 1.908E-04 | 2.428E-04 | 6.591E-05 | 3.642E-04 |

Methodology is the same as page 8.

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.
 See Page 10 for Greenhouse Gas calculations.

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100**

Greenhouse Gas Emissions

Company Name: American Iron Oxide Company
Address City IN Zip: 2001 E CR 700 North, Grandview, IN 47615
Permit Number: T147-29980-00050
Reviewer: Josiah Balogun
Date: 6-Jan-2012

| Emission Factor in lb/MMcf | Greenhouse Gas | | |
|---------------------------------------|----------------|-----|-----|
| | CO2 | CH4 | N2O |
| 120,000 | 2.3 | 2.2 | |
| Potential Emission in tons/yr | 20,814 | 0.4 | 0.4 |
| Summed Potential Emissions in tons/yr | 20,815 | | |
| CO2e Total in tons/yr | 20,940 | | |

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100**

Company Name: American Iron Oxide Company
Address City IN Zip: 2001 E CR 700 North, Grandview, IN 47615
Permit Number: T147-29980-00050
Reviewer: Josiah Balogun
Date: 6-Jan-2012

| | | |
|---------------------------------|-----------------------|---------------------------------|
| Heat Input Capacity MMBtu/hr | HHV mmBtu mmscf | Potential Throughput MMCF/yr |
| 8.0 | 1000 | 70.1 |

| Emission Factor in lb/MMCF | Pollutant | | | | | | |
|-------------------------------|-----------|-------|---------------|-----|---------------------------|-----|-----|
| | PM* | PM10* | direct PM2.5* | SO2 | NOx 100 **see below | VOC | CO |
| Potential Emission in tons/yr | 0.1 | 0.3 | 0.3 | 0.0 | 3.5 | 0.2 | 2.9 |

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
 PM2.5 emission factor is filterable and condensable PM2.5 combined.
 **Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
 MMBtu = 1,000,000 Btu
 MMCF = 1,000,000 Cubic Feet of Gas
 Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
 Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 12 for HAPs emissions calculations.

**Appendix A: Emissions Calculations
 Natural Gas Combustion Only
 MM BTU/HR <100
 HAPs Emissions**

Company Name: American Iron Oxide Company
Address City IN Zip: 2001 E CR 700 North, Grandview, IN 47615
Permit Number: T147-29980-00050
Reviewer: Josiah Balogun
Date: 6-Jan-2012

| HAPs - Organics | | | | | |
|-------------------------------|--------------------|----------------------------|-------------------------|-------------------|--------------------|
| Emission Factor in lb/MMcf | Benzene 2.1E-03 | Dichlorobenzene 1.2E-03 | Formaldehyde 7.5E-02 | Hexane 1.8E+00 | Toluene 3.4E-03 |
| Potential Emission in tons/yr | 7.358E-05 | 4.205E-05 | 2.628E-03 | 6.307E-02 | 1.191E-04 |

| HAPs - Metals | | | | | |
|-------------------------------|-----------------|--------------------|---------------------|----------------------|-------------------|
| Emission Factor in lb/MMcf | Lead 5.0E-04 | Cadmium 1.1E-03 | Chromium 1.4E-03 | Manganese 3.8E-04 | Nickel 2.1E-03 |
| Potential Emission in tons/yr | 1.752E-05 | 3.854E-05 | 4.906E-05 | 1.332E-05 | 7.358E-05 |

Methodology is the same as page 11.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

See Page 13 for Greenhouse Gas calculations.

**Appendix A: Emissions Calculations
 Natural Gas Combustion Only
 MM BTU/HR <100
 Greenhouse Gas Emissions**

Company Name: American Iron Oxide Company
Address City IN Zip: 2001 E CR 700 North, Grandview, IN 47615
Permit Number: T147-29980-00050
Reviewer: Josiah Balogun
Date: 6-Jan-2012

| | Greenhouse Gas | | |
|---------------------------------------|----------------|-----|-----|
| | CO2 | CH4 | N2O |
| Emission Factor in lb/MMcf | 120,000 | 2.3 | 2.2 |
| Potential Emission in tons/yr | 4,205 | 0.1 | 0.1 |
| Summed Potential Emissions in tons/yr | 4,205 | | |
| CO2e Total in tons/yr | 4,230 | | |

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
 Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
 Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
 CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Appendix A: Emission Calculations Unpaved Roads

Company Name: American Iron Oxide Company
Address City IN Zip: 2001 E CR 700 North, Grandview, IN 47615
Permit Number: T147-29980-00050
Reviewer: Josiah Balogun
Date: 6-Jan-2012

The following calculations determine the amount of emissions created by vehicle traffic on unpaved roads, based on 8760 hours of use and AP-42, Ch 13.2.2

| | | | | | |
|------------------------------|---|---|---------------------|--------------|----------------------|
| <u>2.0</u> trips/hr x | | | | | |
| <u>0.2</u> miles/roundtrip x | | | | | |
| 8760 hrs/yr = | | <u>3504</u> miles per year | | | |
| For PM | | | | | |
| | For PM-10 | | | | |
| | $E_f = \{k \cdot [(s/12)^{0.8}] \cdot [(W/3)^b] / [(M_{dry}/0.2)^c] \cdot [(365-p)/365] \cdot S / 15$ | | | | |
| 7.69 | = | 1.60 lb/mile | | | |
| 10 | where k = | 2.6 (particle size multiplier for PM-10) (k=10 for PM-30 or TSP) | | | |
| 6 | s = | 6 mean % silt content of unpaved roads | | | |
| 0.5 | b = | 0.4 Constant for PM-10 (b = 0.5 for PM-30 or TSP) | | | |
| 0.4 | c = | 0.3 Constant for PM-10 (c = 0.4 for PM-30 or TSP) | | | |
| 28 | W = | 28 tons average vehicle weight | | | |
| 0.2 | M _{dry} = | 0.2 surface material moisture content, % (default is 0.2 for dry conditions) | | | |
| 125 | p = | 125 number of days with at least 0.254mm of precipitation (See Figure 13.2.2-1) | | | |
| 10 | S = | 10 miles/hr vehicle speed | | | |
| | | <u>7.69 lb/mi x</u> | <u>3504 mi/yr =</u> | PM | <u>13.48 tons/yr</u> |
| | | 2000 lb/ton | | | |
| | | <u>1.60 lb/mi x</u> | <u>3504 mi/yr =</u> | PM-10 | <u>2.80 tons/yr</u> |
| | | 2000 lb/ton | | | |

| | | | |
|-------------------------------|-----|-------------------------|---------------------|
| Percent emitted after control | 50% | After Control emissions | |
| | | PM | 6.74 tons/yr |
| | | PM-10 | 1.40 tons/yr |
| | | PM2.5 | 1.40 tons/yr |



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

Franz Mullings
1111 N SR 149
Burns Harbor, 46304

Re: Public Notice
American Iron Oxide Company
Permit Level: Title V
Permit Number: 147-29980-00050

Dear Mr. Mullings:

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, Rockport, IN. 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 Journal Democrat in Rockport, IN in publish this notice no later than February 1, 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 Josiah Balogun, 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 4-5257 or dial (317) 234-5257.

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

The Journal Democrat
P.O. Box 6
Rockport, Indiana 47635

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for American Iron Oxide Company, 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 February 2, 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 Debra Pabst at 800-451-6027 and ask for extension 4-5256 or dial 317-234-5256.

Sincerely,

Debra Pabst
Permit Branch
Office of Air Quality

cc: Pat Cuzzort: OAQ Billing, Licensing and Training Section
Permit Level: Title V
Permit Number: 147-29980-00050

Enclosure
PN Newspaper.dot 3/27/08



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Governor

Thomas W. Easterly
Commissioner

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

To: 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: American Iron Oxide Company
Permit Number: 147-29980-00050

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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Mitchell E. Daniels Jr.
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Thomas W. Easterly
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100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

Notice of Public Comment

January 25, 2012

American Iron Oxide Company
147-29980-00050

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 1/25/2012 American Iron Oxide Company (AMROX) 147-29980-00050 (Draft) | | | AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING |
| Name and address of Sender |  | Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204 | Type of Mail: CERTIFICATE OF MAILING ONLY | |

| 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 | | Franz Mullings American Iron Oxide Company (AMROX) 1111 N SR 149 Burns Harbor IN 46304 (Source CAATS) | | | | | | | | | |
| 2 | | Michael Sieckmann VP American Iron Oxide Company (AMROX) 661 Andersen Dr, Foster PI #7 Pittsburgh PA 15220 (RO CAATS) | | | | | | | | | |
| 3 | | Mr. Charles L. Berger Berger & Berger, Attorneys at Law 313 Main Street Evansville IN 47700 (Affected Party) | | | | | | | | | |
| 4 | | Mr. Wendell Hibdon Plumbers & Steam Fitters Union, Local 136 2300 St. Joe Industrial Park Dr Evansville IN 47720 (Affected Party) | | | | | | | | | |
| 5 | | Ms. Francis Lueken 223 W. 10th Street, P.O. Box 206 Ferdinand IN 47532 (Affected Party) | | | | | | | | | |
| 6 | | Richard & Betty Michel 2222 E. County Rd 700 N. Grandview IN 47615 (Affected Party) | | | | | | | | | |
| 7 | | Grandview Town Council P.O. Box 638 Grandview IN 47615 (Local Official) | | | | | | | | | |
| 8 | | Ms. Kathy Tretter Dubois-Spencer Counties Publishing Co, Inc P.O. Box 38 Ferdinand IN 47532-0038 (Affected Party) | | | | | | | | | |
| 9 | | Spencer County Commissioner/Health Dept. 200 Main Street, Courthouse Rockport IN 47635 (Affected Party) | | | | | | | | | |
| 10 | | Spencer County Commissioners 200 Main St., Courthouse Rockport IN 47635 (Local Official) | | | | | | | | | |
| 11 | | Spencer County Health Department Main Street Courthouse, 1st Floor, Room 1 Roackport IN 47635-1492 (Health Department) | | | | | | | | | |
| 12 | | Mr. Mark Wilson Evansville Courier & Press P.O. Box 268 Evansville IN 47702-0268 (Affected Party) | | | | | | | | | |
| 13 | | Mr. John Blair 800 Adams Ave Evansville IN 47713 (Affected Party) | | | | | | | | | |
| 14 | | Spencer County Public Library 210 Walnut St. Rockport IN 47635 (Library) | | | | | | | | | |
| 15 | | | | | | | | | | | |

| | | | |
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