INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: September 5, 2006

RE: American Iron Oxide Company / 147-16252-00050

FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval – Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204.

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

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

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:
(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

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

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

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

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

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

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

Enclosures
FNTVOP.dot 03/23/06

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PART 70 OPERATING PERMIT
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. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-2 and 326 IAC 2-7-10.5, applicable to those conditions.

Operation Permit No.: T 147-16252-00050	
Issued by: Original Signed By: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: September 5, 2006 Expiration Date: September 5, 2011

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1, A.3, and A.4 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.

Responsible Official:	Director of Operations
Source Address:	2001 East County Road 700 North, Grandview, Indiana 47615
Mailing Address:	2001 East County Road 700 North, Grandview, Indiana 47615
General Source Phone:	(812) 362-8150
SIC Code:	2819
County Location:	Spencer
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Rules; Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

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

This iron oxide and hydrochloric acid production plant is located contiguous to AK Steel - Rockport Works, Rockport, Indiana. The two (2) plants are not under common ownership or control. However, they do have a contractual relationship. Although the sources have different SIC Codes, they may be considered support facilities of each other. American Iron Oxide Company has not operated one (1) of the roasters. IDEM, OAQ, cannot determine if American Iron Oxide Company should be considered a support facility of AK Steel until all facilities at American Iron Oxide Company are operational. Thus, the two (2) plants will be considered separate sources at this time, but the decision will be reviewed again when all facilities are operational. Therefore, the issue of whether the proposed plant is considered part of AK Steel, defining them as “one source,” is still unresolved. The Permittee shall notify IDEM, OAQ, in writing when the second roaster begins operation.

A.3 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.4 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. [326 IAC 6-2-4]

(b) Paved and unpaved roads and parking lots with public access. [326 IAC 6-5]

A.5 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, T 147-16252-00050, 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.

(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]

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. The submittal by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.

(b) 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) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

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

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

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
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 the certification by the "responsible official" as

defined by 326 IAC 2-7-1(34).

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

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, 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.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

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

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

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

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

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

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865

(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 Branch, Office of Air Quality
100 North Senate Avenue
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 the certification by the "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.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

(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 T 147-16252-00050 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 combined permit, all previous registrations and permits are superseded by this combined new source review and part 70 operating permit.

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

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

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 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 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "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.17 Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4] [326 IAC 2-7-8(e)]

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

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
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 in writing by IDEM, OAQ, any additional information identified as being needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12] [40 CFR 72]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

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

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Any such application shall be certified by the "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.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

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

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

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (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
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

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

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

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

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

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

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

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

(3) Any change in emissions; and

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

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

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

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

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

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-17-3-2] [IC 13-30-3-1]

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.23 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification by the "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.24 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.25 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 one hundred (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 5-1-3 (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. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

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

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

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

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on plan submitted on May 18, 1998. The plan is included as Attachment A. Pursuant to CP 147-9798-00050, issued on December 30, 1998, the visible emissions shall not exceed an average instantaneous opacity of five percent (5%). Average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass. The three (3) opacity readings for each vehicle pass shall be taken as follows:

(a) The first reading shall be taken at the time of emission generation.

(b) The second reading shall be taken five (5) seconds after the first.

(c) The third reading shall be taken five (5) seconds after the second reading, or ten (10) seconds after the first reading.

The three (3) readings shall be taken approximately four (4) feet from the surface at the point of maximum opacity. The observer shall stand at least fifteen (15) feet, but no more than one-fourth (1/4) mile, from the plume and at approximately right angles to the plume.

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

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

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

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

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

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

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

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

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

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

(e) Procedures for Asbestos Emission Control

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

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

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

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

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

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
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 certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

The notification which shall be submitted by the Permittee does require the certification by the "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.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.13 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.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

within ninety (90) days after the date of issuance of this permit.

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

(c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

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

C.15 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.16 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) Upon detecting an excursion or exceedance, the Permittee shall 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 emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation;

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

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(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;

(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 maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

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

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

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

The response action documents submitted pursuant to this condition do require the certification by the "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.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)] [326 IAC 2-6]

(a) Pursuant to 326 IAC 2-6-3(b)(3), 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
Indianapolis, Indiana 46204-2251

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

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

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

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

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Iron oxide and hydrochloric acid regeneration and recovery

(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-NOX 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-NOX 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 facility description box is descriptive information and does not constitute enforceable conditions.)

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

D.1.1 PSD Minor Limit [326 IAC 2-2]

(a) The particulate emissions shall be limited as follows:

(1) The total ferrous chloride solution processing rate shall not exceed 506,000 tons per

twelve (12) consecutive month period, total, with compliance determined at the end of each month, and the potential to emit PM and PM_{10} from the two (2) hydrochloric acid production systems shall not exceed 0.05 pound per ton of ferrous chloride solution processed for each production system. This will limit the potential to emit PM and PM_{10} from the two (2) hydrochloric acid production systems to 12.65 tons per year.

(2) The total iron oxide/nickel ferrite throughput rate at the four (4) iron oxide storage bins (O-1 through O-4) shall not exceed 8,760 tons per twelve (12) consecutive month period, total, with compliance determined at the end of each month, and the potential to emit PM and PM_{10} from the four (4) iron oxide storage bins (O-1 through O-4) shall not exceed 0.15 pound per ton of iron oxide/nickel ferrite throughput for each storage bin. This will limit the potential to emit PM and PM_{10} from the four (4) iron oxide storage bins (O-1 through O-4) to 0.657 tons per year.

The unrestricted potential to emit PM and PM_{10} from all other processes at this source are 6.81 tons per year and 1.67 tons per year, respectively. Therefore, the limitations in (1) and (2) will limit the potential to emit PM and PM_{10} to less than 25 tons per year and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2, PSD, are not applicable, even if the AK Steel and American Iron Oxide plants are determined to be a single source in the future.

(b) The Permittee shall use low- NO_X burners on all natural gas combustion units. Therefore, the potential to emit NO_X is limited to less than 40 tons per year and the requirements of 326 IAC 2-2, PSD, are not applicable, even if the AK Steel and American Iron Oxide plants are determined to be a single source in the future.

D.1.2 Particulate [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the 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 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate 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 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate 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 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate 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.

The pounds per hour limitation was calculated with the following equation:

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

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

D.1.3 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR Part 63, Subpart A]

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

D.1.4 National Emission Standards for Hazardous Air Pollutants for Steel Pickling - HCI Process Facilities and Hydrochloric Acid Regeneration Plants [40 CFR Part 63, Subpart CCC] [40 CFR 63.1158]

Pursuant to 40 CFR Part 63.1158(b)(1) and (2), Subpart CCC, the hydrochloric acid regeneration plant shall comply with the following requirements:

The Permittee shall not cause or allow to be discharged into the atmosphere from the affected hydrochloric acid regeneration plant:

(a) Any gases that contain HCI in a concentration in excess of 12 ppmv.

(b) Any gases that contain chlorine (Cl_2) in a concentration in excess of either 6 ppmv.

D.1.5 NESHAP Operational and Equipment Standards [40 CFR Part 63.1159, Subpart CCC]

Pursuant to 40 CFR 63.1159, Subpart CCC:

(a) The Permittee shall operate the affected hydrochloric acid regeneration 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 off-gas temperature consistent with producing usable regenerated acid or iron oxide.

(b) The Permittee shall provide and operate, except during loading and unloading of acid, a closed-vent system for each hydrochloric acid storage 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.

D.1.6 NESHAP Maintenance Requirements [40 CFR Part 63.1160, Subpart CCC]

(a) The Permittee shall comply with the operation and maintenance requirements of 40 CFR Part 63.6(e) (Subpart A, General Provisions). Pursuant to 40 CFR Part 63.1160, Subpart CCC, the Permittee shall prepare an operation and maintenance plan for each emission control device to be implemented no later than the compliance date (upon startup). All such plans must be consistent with good maintenance practices and, for a scrubber emission control device, must at a minimum:

(1) 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;

(2) 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;

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

(4) Require an inspection of each scrubber at intervals of no less than three (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.

(5) 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.

(6) The Permittee shall initiate procedures for corrective action within one (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.

(7) The Permittee shall maintain a record of each inspection, including each item identified in (4) above, 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.

(b) The Permittee shall develop and implement a written maintenance program. The program shall require:

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

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

(3) 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.

D.1.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.1.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) Pursuant to CP 147-9798-00050, issued on December 30, 1998, no later than April 11, 2006, the Permittee shall perform PM and PM_{10} testing for the hydrochloric acid recovery system at Process line no. 1, in order to demonstrate compliance with Conditions D.1.1 and D.1.2 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. PM_{10} includes filterable and condensible PM_{10}. Testing shall be conducted in accordance with Section C-Performance Testing.

(b) Pursuant to CP 147-9798-00050, issued on December 30, 1998, within sixty (60) days after achieving maximum capacity, but no later than 180 days after initial startup, in order to demonstrate compliance with Conditions D.1.1 and D.1.2, the Permittee shall perform PM and PM_{10} testing for the hydrochloric acid recovery system at Process line no. 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. PM_{10} includes filterable and condensible PM_{10}. Testing shall be conducted in accordance with Section C- Performance Testing.

(c) During the period between 30 and 36 months after issuance of this Part 70 permit, in order to demonstrate compliance with Conditions D.1.1 and D.1.2, the Permittee shall perform PM and PM_{10} testing for one (1) of the four (4) iron oxide storage bins utilizing methods as approved by the Commissioner. PM_{10} includes filterable and condensible PM_{10}. Testing shall be conducted in accordance with Section C- Performance Testing.

D.1.9 Testing Requirements [40 CFR Part 63.1161, Subpart CCC]

(a) Within six (6) months of permit issuance, the Permittee shall conduct an initial performance test for each affected process or control device to determine and demonstrate compliance with the applicable emission limitation according to the requirements of 40 CFR Part 63.7 (Subpart A, General Provisions). Pursuant to 40 CFR Part 63.1161, Subpart CCC, this initial performance test shall meet the following minimum requirements:

(1) Following approval of the site-specific test plan, the Permittee 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 or measure the concentration of HCl and Cl_2 for hydrochloric acid regeneration plants in gases exiting the process or the emission control device to determine compliance with the applicable emission concentration standards.

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

(3) Compliance is achieved if either the average collection efficiency as determined by the HCl mass flows at the control device inlet and outlet is greater than or equal to the applicable collection efficiency standard, or the average measured concentration of HCl or Cl_2 exiting the process or the emission control device is less than or equal to the applicable emission concentration standard.

(b) During the performance test for each emission control device, the Permittee 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 Permittee shall determine the operating parameter monitoring values as in 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 40 CFR Part 63.1161(a)(2). A Permittee may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, a Permittee 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 off-gas temperature and the maximum proportion of excess air fed to the process as described in 40 CFR Part 63.1162(b)(1). 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 40 CFR 63.1161(a)(2). 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 Cl_2 of 6 ppmv when operated within its design parameters. The alternative concentration standard shall be established through performance testing while the plant is operated at maximum design temperature and with the minimum proportion of excess air that allows production of iron oxide of acceptable quality while measuring the Cl_2 concentration in the process exhaust gas. The measured concentration shall be the concentration standard for that plant.

(d) Pursuant to 40 CFR 63.1162(a)(1), performance tests shall be conducted either annually or according to an alternative schedule approved by IDEM, OAQ, but no less frequently than every two and half (2.5) years or twice per Part 70 Operating Permit term. If any performance test shows that the HCI emission limitation is being exceeded, the Permittee is in violation of the emission limit.

(e) Pursuant to 40 CFR Part 63.1163(d), the Permittee of an affected source shall notify IDEM, OAQ 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 IDEM, OAQ to review and approve the site-specific test plan required under 40 CFR Part 63.7(c), and, if requested by IDEM, OAQ, to have an observer present during the test.

(f) The following test methods from Appendix A of 40 CFR Part 60 shall be used to determine compliance under 40 CFR 63.1158(b):

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

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

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

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

(5) Method 26A, “Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources B 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. If compliance with a collection efficiency standard is being demonstrated, inlet and outlet measurements shall be performed simultaneously. The mini-

mum sampling time for each run shall be 60 minutes and the minimum sample volume 0.85 dry standard cubic meters (dscm) [30 dry standard cubic feet (dscf)]. The concentration of HCl shall be calculated for each run as follows: $C_{HCL(ppmv)} = 0.659\ C_{HCL(mg/dscm)}$, where $C_{(ppmv)}$ is concentration in ppmv and $C_{(mg/dscm)}$ is concentration in milligrams per dry standard cubic meter as calculated by the procedure given in Method 26A.

(6) The Permittee may use equivalent alternative measurement methods approved by U.S. EPA.

D.1.10 Particulate, Cl_2 and HCl Control [326 IAC 2-7-6(6)]

(a) In order to comply with Conditions D.1.1, D.1.2, D.1.4 and D.1.5, the scrubbers, absorbers and baghouses shall be in operation at all times the iron oxide and hydrochloric acid production plant is in operation.

(b) In the event that bag, absorber or scrubber failure is observed in a multi-compartment unit, 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.

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

D.1.11 Monitoring Requirements [40 CFR Part 63.1162]

(a) The Permittee shall:

(1) Install, operate and maintain systems for the measurement and recording of the scrubber makeup water flow rate and, if required, recirculation water flow rate for all scrubbers used to comply with the requirements of 40 CFR Part 63, Subpart CCC. 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 40 CFR Part 63.1160(b)(2).

(2) Failure to record each of the operating parameters in 40 CFR Part 63.1162(a)(2) is a violation of the monitoring requirements of 40 CFR Part 63, Subpart CCC.

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

(4) The Permittee may develop and implement alternative monitoring requirements subject to approval by IDEM, OAQ.

(b) The Permittee shall install, operate, and maintain systems for the measurement and recording of the:

(1) Process off-gas 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 40 CFR Part 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 five percent (5%) 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 off-gas 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 40 CFR Part 63.1159(a) of this subpart.

(c) Pursuant to 40 CFR 63.1162, the Permittee shall inspect each hydrochloric acid storage 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.

D.1.12 Visible Emissions Notations

(a) Daily visible emission notations of the hydrochloric acid production system and iron oxide storage bin stack exhausts shall be performed 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 in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.13 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

(a) Pursuant to CP 147-9798-00050, issued on December 30, 1998, 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 in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.1.14 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 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 baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

D.1.15 Venturi Scrubber Parametric Monitoring

(a) The Permittee shall monitor the scrubber makeup liquid flow rate for each of the 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 in accordance with Section C - Response to Excursions or Exceedances. A flow rate reading that is below the normal minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(b) The instrument used for determining the flow rate 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.

(c) The pressure drop across each of the 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 baghouse 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 in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(d) 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.1.16 Compliance Assurance Monitoring [40 CFR Part 64]

A Compliance Assurance Monitoring Plan is required for PM and PM_{10} emissions from the two (2) process lines. 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:

(1) Inspections and Maintenance

(A) 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.

(B) The Permittee shall clean scrubber internals and mist eliminators at intervals sufficient to prevent buildup of any solids.

(C) Quarterly inspections shall be performed of each scrubber and mist eliminator.

(D) 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.

(E) 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.

(F) As required, or upon inspection, the Permittee shall repair or replace mist eliminator elements, if needed.

(2) Testing

The Permittee shall perform PM and PM_{10} testing as required in Condition D.1.8.

(3) Monitoring

(A) The Permittee shall monitor the scrubber makeup liquid flow rate as required by Condition D.1.15.

(B) The Permittee shall monitor the pressure drop across the scrubber as required by Condition D.1.15.

(C) The Permittee shall conduct visible emissions observations as required by Condition D.1.12.

(b) One (1) baghouse for each of the four (4) iron oxide storage bins, exhausting through Stacks O-1 through O-4:

(1) Inspections and Maintenance

(A) 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.

(B) When a bag failure is detected, the Permittee shall be required to comply with Conditions D.1.10(b) and D.1.14.

(2) Testing

The Permittee shall perform PM and PM_{10} testing as required in Condition D.1.8.

(3) Monitoring

(A) The Permittee shall monitor the pressure drop across the baghouses as required by Condition D.1.13.

(B) The Permittee shall conduct visible emissions observations as required by Condition D.1.12.

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

D.1.17 Record Keeping Requirements

(a) To document compliance with Conditions D.1.4 and D.1.5, the Permittee shall maintain the following records pursuant to 40 CFR Part 63.1165:

(1) The Permittee, as required by 40 CFR Part 63.10(b)(2) (Subpart A, General Provisions), shall maintain general records for 5 years from the date of each record of:

(A) The occurrence and duration of each startup, shutdown, or malfunction of operation;

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

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

(D) Actions taken during periods of startup, shutdown, and malfunction and the dates of such actions when these actions are different from the procedures specified in the startup, shutdown, and malfunction plan;

(E) 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 40 CFR Part 63.10(b)(2)(v));

(F) 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;

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

(H) If the Permittee has been granted a waiver from record keeping or reporting requirements under 40 CFR Part 63.10(f), any information demonstrating whether a source is meeting the requirements for a waiver of record keeping or reporting requirements;

(I) If the Permittee has been granted a waiver from the initial performance test

under 40 CFR Part 63.7(h), a copy of the full request and approval or disapproval;

(J) All documentation supporting initial notifications and notifications of compliance status required by 40 CFR Part 63.9; and

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

(2) Records specifically required under 40 CFR Part 63, Subpart CCC:

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

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

(C) Each maintenance inspection and repair, replacement, or other corrective action;

(D) The Permittee shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon re--quest, by IDEM, OAQ for the life of the affected source or until the source is no longer subject to these provisions. In addition, if the operation and maintenance plan is revised, the Permittee shall keep previous (i.e., superseded) versions of the plan on record to be made available for inspection by IDEM, OAQ for a period of 5 years after each revision to the plan.

(b) Records maintained pursuant to the record keeping requirements of 40 CFR Part 63, Subpart CCC, shall be maintained on site for a period of 2 years. Records for the 3 previous years may be maintained off site.

(c) To document compliance with Condition D.1.1, the Permittee shall maintain records of the total ferrous chloride solution processing rate at the two (2) hydrochloric acid production systems and the total iron oxide and nickel ferrite throughput at the four (4) iron oxide storage bins.

(d) To document compliance with Condition D.1.12, the Permittee shall maintain records of visible emission notations of the iron oxide storage bins baghouse stack exhaust once per day.

(e) To document compliance with Condition D.1.13, the Permittee shall maintain records of the pressure drop across the iron oxide storage bins baghouse during normal operation when the alarm sounds.

(f) To document compliance with Condition D.1.15, the Permittee shall maintain records once per day of the flow rate of the venturi scrubbers during normal operation.

(g) To document compliance with Condition D.1.15, the Permittee shall maintain records of the pressure drop across the venturi scrubbers during normal operation when the alarm sounds.

(h) To document compliance with Condition D.1.16, the Permittee shall maintain records of the results of the inspections and maintenance procedures required under Condition D.1.16.

(i) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.18 Reporting Requirements [40 CFR Part 63.1164]

(a) As required by 40 CFR Part 63.10(d)(2), the Permittee of an affected source shall report the results of any performance test as part of the notification of compliance status required in 40 CFR Part 63.1163.

(b) The Permittee of an affected source who is required to submit progress reports under 40 CFR Part 63.6(i), shall submit such reports to IDEM, OAQ by the dates specified in the written extension of compliance.

(c) Pursuant to 40 CFR Part 63.6(e), the Permittee 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 time, including during any period of startup, shutdown, or malfunction. Malfunctions must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan.

(1) As required by 40 CFR Part 63.6(e)(3), the Permittee shall develop and implement 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 standard.

(2) As required by 40 CFR Part 62.10(d)(5)(i), if actions taken by an Permittee 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 Permittee shall state such information in a semiannual report. The report, to be certified by the Permittee 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) Any time an action taken by an Permittee 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 Permittee shall comply with all requirements of 40 CFR Part 63.10(d)(5)(ii).

(d) Reports shall be submitted in accordance with Section C - General Reporting Requirements of this permit. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

D.1.19 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(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-NOx 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. [326 IAC 6-2-4]

(b) Paved and unpaved roads and parking lots with public access. [326 IAC 6-5]

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

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

D.2.1 Particulate [326 IAC 6-2-4]

(a) Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) the PM from the 8.0 million British thermal units per hour heat input boiler shall be limited to 0.6 pounds per million British thermal units heat input.

(b) Pursuant to 326 IAC 6-2-4(a), for total heat input capacities less than 10 million British thermal units per hour, the PM emissions shall not exceed 0.6 pounds per million British thermal units heat input.

See Condition C.6 for 326 IAC 6-5 requirements.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: American Iron Oxide Company
Source Address: 2001 East County Road 700 North, Grandview, Indiana 47615
Mailing Address: 2001 East County Road 700 North, Grandview, Indiana 47615
Part 70 Permit No.: T 147-16252-00050

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 BRANCH
100 North Senate Avenue
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 East County Road 700 North, Grandview, Indiana 47615
Mailing Address: 2001 East County Road 700 North, Grandview, Indiana 47615
Part 70 Permit No.: T 147-16252-00050

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

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

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: American Iron Oxide Company
Source Address: 2001 East County Road 700 North, Grandview, Indiana 47615
Mailing Address: 2001 East County Road 700 North, Grandview, Indiana 47615
Part 70 Permit No.: T 147-16252-00050
Facilities: Two (2) hydrochloric acid production systems
Parameter: Waste pickle liquor processing rate
Limit: 506,000 tons per twelve (12) consecutive month period, total, with compliance determined at the end of each month.

YEAR:

Month	Waste pickle liquor processing rate (tons)	Waste pickle liquor processing rate (tons)	Waste pickle liquor processing rate (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: American Iron Oxide Company
Source Address: 2001 East County Road 700 North, Grandview, Indiana 47615
Mailing Address: 2001 East County Road 700 North, Grandview, Indiana 47615
Part 70 Permit No.: T 147-16252-00050
Facilities: Four (4) iron oxide storage bins
Parameter: Iron oxide/nickel ferrite throughput
Limit: 8,760 tons per twelve (12) consecutive month period, total, with compliance determined at the end of each month.

YEAR:

Month	Iron oxide/nickel ferrite throughput (tons)	Iron oxide/nickel ferrite throughput (tons)	Iron oxide/nickel ferrite throughput (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: American Iron Oxide Company
Source Address: 2001 East County Road 700 North, Grandview, Indiana 47615
Mailing Address: 2001 East County Road 700 North, Grandview, Indiana 47615
Part 70 Permit No.: T 147-16252-00050

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

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

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

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: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document for a Part 70 Operating Permit

Source Name: **American Iron Oxide Company**
Source Location: **2001 East County Road 700 North, Grandview, Indiana 47615**
County: **Spencer**
SIC Code: **2819**
Operation Permit No.: **T 147-16252-00050**
Permit Reviewer: **CarrieAnn Paukowits**

On April 5, 2006, the Office of Air Quality (OAQ) had a notice published in the Journal Democrat, Rockport, Indiana, stating that American Iron Oxide Company had applied for a Part 70 Operating Permit to operate an iron oxide and hydrochloric acid production source with scrubbers and baghouses as controls. The notice also stated that OAQ proposed to issue a Part 70 Operating Permit for this operation and provided information on how the public could review the proposed Part 70 Operating Permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Part 70 Operating Permit should be issued as proposed.

On May 5, 2006, Arnnie Dodderer of Kirkpatrick & Lockhart Nicholson Graham LLP, on behalf of American Iron Oxide Company, submitted comments on the proposed Part 70 Operating Permit. The comments are as follows (The permit language, if changed, has deleted language as ~~strikeouts~~ and new language bolded.):

Comment 1:

General Comments

(a) The Draft Permit should only reference the applicable regulatory provisions and not seek to restate regulatory requirements within the permit.

(b) The Draft Permit should include a provision stating that to the extent any provision or condition differs from the applicable and lawfully promulgated regulatory requirement, the applicable regulatory requirement shall control in lieu of the permit requirements.

(c) The Draft Permit references requirements contained within construction permits that should be eliminated because such permits are no longer in effect or relevant. Such permits were issued based upon projected, not actual, conditions.

(d) It is AMROX's contention that EPA improperly promulgated the emission limits contained at 40 CFR Part 63, Subpart CCC, and as such they are not enforceable and must be corrected.

(e) The Facility uses ferrous chloride solution as feedstock to produce iron oxide and hydrochloric acid products. Accordingly: (i) all instances referring to the Facility as an iron oxide and hydrochloric "regeneration and recovery plant" should be revised to describe the Facility as an iron oxide and hydrochloric acid "production plant;" (ii) all references to "hydrochloric acid recovery system" should be revised to state "hydrochloric acid production system;" and (iii) all references to "waste pickle liquor" should be revised to state "ferrous chloride solution."

(f) The Draft Permit should be revised as appropriate to be consistent with IDEM's initiative to reduce burdensome, unnecessary and/or redundant reporting and recordkeeping requirements.

(g) The Facility's major or minor source status has not yet been determined. Accordingly, all references to the Facility as a major source should be deleted or revised accordingly. In addition, where appropriate, all major source requirements or conditions, including all emissions and other limits, reporting and recordkeeping requirements, should be revised to reflect that they only apply if the Facility is determined to be a major source.

Response 1:

(a) Pursuant to 326 IAC 2-7-5, Permit Content, the permit should contain emission limitations and standards, compliance monitoring, recordkeeping and reporting requirements, and the additional conditions specified in that rule. IDEM includes the specific requirements applicable to the source within the permit document, in an effort to ensure continuous compliance with the requirements. This assists the Permittee in determining what they need to do to comply with the regulations, and facilitates compliance determination by IDEM personnel. No change has been made in response to this comment.

(b) The Part 70 Operating Permit contains the applicable limits at the time of permit issuance. As indicated in Conditions B.12 and B.16, 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 Permittee may also apply for an administrative amendment or permit modification if errors are found in the permit. However, if a rule upon which a condition is based is changed, the Permittee will remain subject to the conditions in the permit until the permit is modified. Pursuant to Condition B.3, 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 the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act, or the emission unit to which the condition pertains permanently ceases operation. No change has been made in response to this comment.

(c) Pursuant to Condition B.13, provided that all terms and conditions are accurately reflected in this combined permit, all previous registrations and permits are superseded by this combined new source review and Part 70 Operating Permit. If requirements from previously issued construction permits are no longer relevant, they should not be included in this permit. However, all terms included in this permit were determined to still be applicable based upon the information provided in the application. No change has been made in response to this comment.

(d) The National Emission Standards for Hazardous Air Pollutants (NESHAP) for Hydrochloric Acid Process Steel Pickling Facilities and Hydrochloric Acid Regeneration Plants was proposed on September 18, 1997 (62 FR 49051); the June 22, 1999, Federal Register publication (64 FR 33202) announced EPA's final decision on this rule. Under section 307(b)(1) of the Clean Air Act, judicial review of this final rule is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit within 60 days from the date of publication in the Federal Register.

Under section 307(b)(2) of the Act, the requirements established by June 22, 1999, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Hydrochloric Acid Process Steel Pickling Facilities and Hydrochloric Acid Regeneration Plants (40 CFR 63, subpart CCC) final rule may not be challenged later in any civil or criminal proceeding brought by EPA to enforce these requirements. The final date to challenge this rule has passed. No change has been made in response to this comment.

(e) The phrase "regeneration" is used by USEPA as part of 40 CFR 63, Subpart CCC. Although AMROX prefers hydrochloric acid production, in reality AMROX uses a collection of equipment and processes configured to reconstitute fresh hydrochloric acid pickling solution from spent pickle liquor (ferrous chloride) using a thermal treatment process and produce regenerated hydrochloric acid and iron oxide. However, changes have been made to the permit, as requested, as described in Responses 4 and 10.

(f) The intent of the Part 70 permit program is to ensure that all reasonable information is provided to evaluate continuous compliance with the applicable requirements. The permit only contains those reporting and recordkeeping requirements deemed to be necessary. No change has been made in response to this comment.

(g) Based on the most recent stack tests, conducted on April 10 and 11, 2001, and the information provided in the application, this source is a major source of HAPs. IDEM, OAQ, understands that tests scheduled for June 2006 may show that the source is not and never was a major source of HAPs. However, until that time, the burden of proof is on the applicant, and no information has been provided at this time to show that this source is not a major source of HAPs. Therefore, the limitations in the permit are necessary. If the tests support that the source is not, and never has been, a major source of HAPs, the Permittee may apply to transition to the Minor Source Operating Permit (MSOP) or Federally Enforceable State Operating Permit (FESOP) programs under 326 IAC 2-6.1 or 326 IAC 2-8. Until such permit is issued, the requirements in this permit will remain applicable. No change has been made in response to this comment.

Comment 2:

Section A.1, Page 5. See Comment 1(e) above regarding revision of terms describing the Facility and its operations.

Response 2:

Section A.1 has been revised as follows:

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

The Permittee owns and operates a stationary iron oxide and hydrochloric acid ~~regeneration and recovery~~ **production** source.

Responsible Official:	Director of Operations
Source Address:	2001 East County Road 700 North, Grandview, Indiana 47615
Mailing Address:	2001 East County Road 700 North, Grandview, Indiana 47615
General Source Phone:	(812) 362-8150
SIC Code:	2819
County Location:	Spencer
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Rules; Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

Comment 3:

Section A.2, Page 5. See Comment 1(e) above regarding revision of terms describing the facility and its operations. In addition, the Facility should be considered a separate source and references to the contrary should be deleted.

Response 3:

This plant is located contiguous to AK Steel - Rockport Works, Rockport, Indiana. The two (2) plants are not under common ownership or control. However, they do have a contractual relationship. Although the sources have different SIC Codes, they may be considered support facilities of each other. American Iron Oxide Company has not operated one (1) of the roasters. IDEM, OAQ, cannot determine if American Iron Oxide Company should be considered a support facility of AK Steel until all facilities at American Iron Oxide Company are operational. Thus, the two (2) plants will be considered separate sources at this time, but the decision will be reviewed again when all facilities are operational. Therefore, the issue of whether the proposed plant is considered part of AK Steel, defining them as "one source," is still unresolved.

Condition A.2 has been revised as follows:

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

This iron oxide and hydrochloric acid ~~regeneration and recovery~~ **production** plant is located contiguous to AK Steel - Rockport Works, Rockport, Indiana. The two (2) plants are not under common ownership or control. However, they do have a contractual relationship. Although the sources have different SIC Codes, they may be considered support facilities of each other. American Iron Oxide Company has not operated one (1) of the roasters. IDEM, OAQ, cannot determine if American Iron Oxide Company should be considered a support facility of AK Steel until all facilities at American Iron Oxide Company are operational. Thus, the two (2) plants will be considered separate sources at this time, but the decision will be reviewed again when all facilities are operational. Therefore, the issue of whether the proposed plant is considered part of AK Steel, defining them as "one source," is still unresolved. The Permittee shall notify IDEM, OAQ, in writing when the second roaster begins operation.

Comment 4:

(a) Section A.3.a, Page 5. See Comment 1(e) above regarding revision of terms describing the Facility and its operations. In addition, Section A.3.a.1 should be further revised to reflect a maximum processing rate of 15 tons per hour without reference to 4,380 gallons. The maximum heat input for the low NO_X burners should be revised to reflect 39.6 million BTUs. The stack exhaust system should be identified as "S-1" and not identified the same as the Roaster ("R-1"). Section A.3.a.2 should be revised to delete the maximum throughput rate of the oxide storage bins.

(b) Section A.3.b, Page 6. See Comment 1(e) above regarding revision of terms describing the Facility and its operations. In addition, Section A.3.b.1 should be further revised to reflect a maximum processing rate of 15 tons per hour without reference to 4,380 gallons per hour. The maximum heat input for the low-NO_X burners should be revised to reflect 39.6 million BTUs. The stack exhaust system should be referred to as "S-1" and not identified the same as the Roaster ("R-1"). Section A.3.b.2 should be revised to delete the maximum throughput rate of the oxide storage bins.

(c) Sections A.3.e, Page 6. See Comment 1(e) above regarding revision of terms describing the Facility and its operations. In addition, this section should be revised to reflect a total of 16 storage tanks: 15 tanks that are used to store ferrous chloride solution or product hydrochloric acid, each having a capacity of 50,000 gallons; and one tank used to store virgin hydrochloric acid, having a capacity of 35,000 gallons. All other descriptions should be deleted.

Response 4:

The technical support and draft permit documents were based upon the application submitted. Based on this comment, the application was incorrect. Due to the heat input capacity change of the roaster mentioned in this comment, the emission calculations for combustion at the roasters have been revised as Appendix A to this TSD Addendum. The change in the descriptions does not change the applicable rules or limitations. Condition A.3 and the facility descriptions in Section D.1 have been revised as follows:

A.3 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) ~~o~~**One** (1) hydrochloric acid ~~recovery~~ **production** system with a maximum processing rate of 15 tons ~~(4,380 gallons)~~ per hour of ~~waste pickle liquor~~ **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 ~~26.8~~ **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 ~~R-1~~ **S-1**.~~; and~~ **Under NESHAP Subpart CCC, this is a hydrochloric acid recovery system.**

(2) ~~t~~**T**wo (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) ~~o~~**One** (1) hydrochloric acid ~~recovery~~ **production** system with a maximum processing rate of 15 tons ~~(4,380 gallons)~~ per hour of ~~waste pickle liquor~~ **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 ~~26.8~~ **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 ~~R-2~~ **S-2**.~~; and~~ **Under NESHAP Subpart CCC, this is a hydrochloric acid recovery system.**

(2) ~~t~~**T**wo (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 ~~two (2)~~ **fifteen (15)** 50,000 gallon storage tanks for ~~regenerated~~ **product** hydrochloric acid, ~~identified as T-1 and T-2; seven (7) 50,000 gallon storage tanks for~~ **or ferrous chloride solution** ~~spent pickle liquor~~, identified as ~~T-3~~ **T-1** through T-9 **and T-11 through T-16, and** one (1) 35,000 gallon storage tank for ~~fresh~~ **virgin hydrochloric** acid, identified as T-10~~; two (2) 50,000 gallon storage tanks for raffinate, identified as T-11 and T-12; and four (4) 50,000 gallon storage tanks for purified iron liquor, identified as T-13 through T-16~~. 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.**

Based upon these changes, the potential to emit after issuance of this source is (changes shown in bold and strikeout):

	Limited Potential to Emit (tons/year)						
Process/facility	**PM**	**PM_{10}**	**SO_2**	**VOC**	**CO**	**NO_X**	**HAPs**
Hydrochloric acid recovery systems	12.65	12.65	~~0.140~~ **0.208**	~~1.29~~ **1.91**	~~19.7~~ **29.1**	35.2	~~42.3~~ **42.7**
Iron oxide storage bins (O-1 through O-4)	0.657	0.657	-	-	-	-	-
Chlorine system, solvent extraction system (C-1) and tank farm (TS-1)	-	-	-	-	-	-	2.10
Insignificant activities	6.81	1.67	0.021	0.193	2.94	1.75	0.066
Total Emissions	20.1	< 15	~~0.161~~ **0.229**	~~1.48~~ **2.10**	~~22.6~~ **32.0**	37.0	~~44.5~~ **44.9**

Comment 5:

Section A.5, Page 6. See Comment 7 above regarding the pending determination of the Facility's major or minor source status. Based upon results from tests at other similar AMROX facilities, we expect the testing described above and in the January 2006 correspondence to confirm that the Facility is not and never has been a major source facility.

Response 5:

See Response 1(g). No change has been made in response to this comment.

Comment 6:

Section C.3, Page 17. The Facility does not engage in open burning and therefore this condition should be deleted.

Response 6:

This condition states, "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. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable." The condition is a general prohibition against improper open burning that applies to all sources, whether the source has engaged in open burning or not. No change has been made in response to this comment.

Comment 7:

Section C.6, Page 17. There are limited unpaved surfaces at the Facility, primarily used for employee parking. In accordance with 326 IAC 6-5-7(d), the fugitive emissions at the Facility are not significantly impacting the air quality outside the property line, and the cost of controlling fugitive emissions at the Facility is not commensurate with the degree of air quality improvement that would be achieved by implementing the requirements of the fugitive dust plan. Accordingly, the requirements relating to the referenced fugitive dust plan should be deleted.

Response 7:

This source is a new source of fugitive particulate matter emissions, requiring a permit as set forth in 326 IAC 2, which did not receive all the necessary preconstruction approvals before December 13, 1985. Therefore, the source is subject to the requirements of 326 IAC 6-5. Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on May 18, 1998. The plan, submitted by the source, contained the control measured proposed by the source and approved by IDEM, OAQ. Therefore, the requirements will not be deleted. No change has been made in response to this comment.

Comment 8:

Section C.8, Page 18. The Facility's permitted operations involve no asbestos abatement projects and therefore this condition should be deleted.

Response 8:

IDEM, OAQ, includes all applicable requirements contained in Title 326 of the Indiana Air Code (IAC) in the Part 70 Operating Permits. Condition C.8, Asbestos Abatement Projects, is applicable to every source located in Indiana, regardless of operation or potential emissions. Pursuant to 326 IAC 14-10-2(14) (Definitions), A "demolition" means the wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations or the intentional burning of any facility. Pursuant to 326 IAC 14-10-1(a)(1) (Applicability), notification is required even if no asbestos is present. No change has been made in response to this comment.

Comment 9:

Sections C.18 – C.20, Pages 22 – 23. See Comment 1(f) above regarding consideration of IDEM's initiative to reduce burdensome, unnecessary and/or redundant reporting and recordkeeping requirements. These sections should be revised as appropriate to reflect that initiative. In addition, see Comment 1(g) above regarding the pending determination of the Facility's major source status. Where appropriate, all major source reporting and recordkeeping requirements should be revised to reflect that they apply only if the Facility is determined to be a major source.

Response 9:

IDEM's initiative to reduce burdensome, unnecessary and/or redundant reporting and recordkeeping requirements took place prior to the publication of the public notice for this source. Therefore, the permit only contains those recordkeeping requirements that IDEM has determined necessary to ensure continuous compliance. See Responses 1(f) and 1(g). No change has been made in response to this comment.

Comment 10:

Section D.1, Page 25. See Comment 1(e) above regarding revision of terms describing the Facility and its operations. See also Comment 4 above relating to Facility and operations descriptions and the use of appropriate terms, and revise accordingly.

Response 10:

The facility description box has been revised as shown in Response 4. Where NESHAP Subpart CCC is referring to a hydrochloric acid recovery plant, the permit language has not been revised. In all other conditions, the permit language has been revised, as follows:

D.1.1 PSD Minor Limit [326 IAC 2-2]

(a) The particulate emissions shall be limited as follows:

(1) The total ~~waste pickle liquor~~ **ferrous chloride solution** processing rate shall not exceed 506,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month, and the potential to emit PM and PM_{10} from the two (2) hydrochloric acid ~~recovery~~ **production** systems shall not exceed 0.05 pound per ton of ~~waste pickle liquor~~ **ferrous chloride solution** processed. This will limit the potential to emit PM and PM_{10} from the two (2) hydrochloric acid ~~recovery~~ **production** systems to 12.65 tons per year.

(2) The total iron oxide/nickel ferrite throughput rate at the four (4) iron oxide storage bins (O-1 through O-4) shall not exceed 8,760 tons per twelve (12) consecutive month period, with compliance determined at the end of each month, and the potential to emit PM and PM_{10} from the four (4) iron oxide storage bins (O-1 through O-4) shall not exceed 0.15 pound per ton of iron oxide/nickel ferrite throughput. This will limit the potential to emit PM and PM_{10} from the four (4) iron oxide storage bins (O-1 through O-4) to 0.657 tons per year.

The unrestricted potential to emit PM and PM_{10} from all other processes at this source are 6.81 tons per year and 1.67 tons per year, respectively. Therefore, the limitations in (1) and (2) will limit the potential to emit PM and PM_{10} to less than 25 tons per year and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2, PSD, are not applicable, even if the AK Steel and American Iron Oxide plants are determined to be a single source in the future.

(b) The Permittee shall use low- NO_X burners on all natural gas combustion units. Therefore, the potential to emit NO_X is limited to less than 40 tons per year and the requirements of 326 IAC 2-2, PSD, are not applicable, even if the AK Steel and American Iron Oxide plants are determined to be a single source in the future.

D.1.2 Particulate [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the hydrochloric acid ~~recovery~~ **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 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the hydrochloric acid ~~recovery~~ **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 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate 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 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate 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.

The pounds per hour limitation was calculated with the following equation:

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

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

D.1.10 Particulate, Cl_2 and HCl Control [326 IAC 2-7-6(6)]

(a) In order to comply with Conditions D.1.1, D.1.2, D.1.4 and D.1.5, the scrubbers, absorbers and baghouses shall be in operation at all times the iron oxide and hydrochloric acid ~~regeneration and recovery~~ **production** plant is in operation.

(b) In the event that bag, absorber or scrubber failure is observed in a multi-compartment unit, 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.1.12 Visible Emissions Notations

(a) Daily visible emission notations of the hydrochloric acid ~~recovery~~ **production** system and iron oxide storage bin stack exhausts shall be performed 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 in accordance with Section C - Response to Excursions or Exceedances. Failure to take

response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.15 Venturi Scrubber Parametric Monitoring

(a) The Permittee shall monitor the scrubber makeup liquid flow rate for each of the venturi scrubbers once per day when the hydrochloric acid ~~recovery~~ **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 in accordance with Section C - Response to Excursions or Exceedances. A flow rate reading that is below the normal minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(b) The instrument used for determining the flow rate 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.

(c) The pressure drop across each of the 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 baghouse 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 in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(d) 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.1.16 Compliance Assurance Monitoring [40 CFR Part 64]

A Compliance Assurance Monitoring Plan is required for PM and PM_{10} emissions from the two (2) process lines. 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 ~~recovery~~ **production** systems:

(1) Inspections and Maintenance

(A) 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.

(B) The Permittee shall clean scrubber internals and mist eliminators at intervals sufficient to prevent buildup of any solids.

(C) Quarterly inspections shall be performed of each scrubber and mist eliminator.

(D) 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.

(E) 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.

(F) As required, or upon inspection, the Permittee shall repair or replace mist eliminator elements, if needed.

(2) Testing

The Permittee shall perform PM and PM_{10} testing as required in Condition D.1.8.

(3) Monitoring

(A) The Permittee shall monitor the scrubber makeup liquid flow rate as required by Condition D.1.15.

(B) The Permittee shall monitor the pressure drop across the scrubber as required by Condition D.1.15.

(C) The Permittee shall conduct visible emissions observations as required by Condition D.1.12.

(b) One (1) baghouse for each of the four (4) iron oxide storage bins, exhausting through Stacks O-1 through O-4:

(1) Inspections and Maintenance

(A) 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.

(B) When a bag failure is detected, the Permittee shall be required to comply with Conditions D.1.10(b) and D.1.14.

(2) Testing

The Permittee shall perform PM and PM_{10} testing as required in Condition D.1.8.

(3) Monitoring

(A) The Permittee shall monitor the pressure drop across the baghouses as required by Condition D.1.13.

(B) The Permittee shall conduct visible emissions observations as required by Condition D.1.12.

D.1.17 Record Keeping Requirements

(a) To document compliance with Conditions D.1.4 and D.1.5, the Permittee shall maintain the following records pursuant to 40 CFR Part 63.1165:

(1) The Permittee, as required by 40 CFR Part 63.10(b)(2) (Subpart A, General Provisions), shall maintain general records for 5 years from the date of each record

of:

(A) The occurrence and duration of each startup, shutdown, or malfunction of operation;

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

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

(D) Actions taken during periods of startup, shutdown, and malfunction and the dates of such actions when these actions are different from the procedures specified in the startup, shutdown, and malfunction plan;

(E) 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 40 CFR Part 63.10(b)(2)(v));

(F) 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;

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

(H) If the Permittee has been granted a waiver from record keeping or reporting requirements under 40 CFR Part 63.10(f), any information demonstrating whether a source is meeting the requirements for a waiver of record keeping or reporting requirements;

(I) If the Permittee has been granted a waiver from the initial performance test under 40 CFR Part 63.7(h), a copy of the full request and approval or disapproval;

(J) All documentation supporting initial notifications and notifications of compliance status required by 40 CFR Part 63.9; and

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

(2) Records specifically required under 40 CFR Part 63, Subpart CCC:

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

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

(C) Each maintenance inspection and repair, replacement, or other corrective action;

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

(b) Records maintained pursuant to the record keeping requirements of 40 CFR Part 63, Subpart CCC, shall be maintained on site for a period of 2 years. Records for the 3 previous years may be maintained off site.

(c) To document compliance with Condition D.1.1, the Permittee shall maintain records of the total ~~waste pickle liquor~~ **ferrous chloride solution** processing rate at the two (2) hydrochloric acid ~~recovery~~ **production** systems and the total iron oxide and nickel ferrite throughput at the four (4) iron oxide storage bins.

(d) To document compliance with Condition D.1.12, the Permittee shall maintain records of visible emission notations of the iron oxide storage bins baghouse stack exhaust once per day.

(e) To document compliance with Condition D.1.13, the Permittee shall maintain records of the pressure drop across the iron oxide storage bins baghouse during normal operation when the alarm sounds.

(f) To document compliance with Condition D.1.15, the Permittee shall maintain records once per day of the flow rate of the venturi scrubbers during normal operation.

(g) To document compliance with Condition D.1.15, the Permittee shall maintain records of the pressure drop across the venturi scrubbers during normal operation when the alarm sounds.

(h) To document compliance with Condition D.1.16, the Permittee shall maintain records of the results of the inspections and maintenance procedures required under Condition D.1.16.

(i) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Comment 11:

Section D.1.1, Pages 25 – 26. As IDEM correctly concludes, PSD Minor Limits set forth at 326 IAC 2-2 do not apply. This section should be deleted to avoid confusion, misunderstandings and/or the application of inappropriate requirements.

Response 11:

See Response 1(g). If Condition D.1.1 is removed from the permit and this source is determined to be part of the AK Steel plant, the source may be found in violation of 326 IAC 2-2, PSD. No change has been made in response to this comment.

Comment 12:

Section D.1.2, Page 26. This section unnecessarily references baghouse throughput rates. To avoid confusion, misunderstandings and/or the application of inappropriate requirements, this section should be revised to state only that the baghouses should be operational and not reference throughput rates or potentials to emit.

Response 12:

The process weight rates in Condition D.1.2 are the weight of raw materials through the process, not through the baghouse. These requirements are applicable pursuant to 326 IAC 6-3-2. No change has been made in response to this comment.

Comment 13:

Section D.1.3, Page 27. See Comments 1(d) and 1(g) above regarding the applicability of Subpart CCC and the Facility's major or minor source status. This Section should be revised to read: 'If it is determined that the Facility is a major source of HAPs, the Facility shall comply with the requirements of 40 CFR Part 63 Subpart A, as incorporated as 326 IAC 20-1-1, except as otherwise specified in 40 CFR Part 63, Subpart CCC."

Response 13:

See Responses 1(d) and 1(g). No change has been made in response to this comment.

Comment 14:

Section D.1.4, Page 27. See Comments 1(d) and 1(g) above regarding the applicability of Subpart CCC and the Facility's major or minor source status. "If it is determined that the facility is a major source of HAPs, the Facility shall comply with the requirements of 40 CFR Part 63 Subpart CCC, if applicable. To the extent Subpart CCC applies, only those requirements pertaining to existing facilities shall apply." In addition, see Comment 1 above regarding the restatement of referenced regulatory provisions. This section should only reference the regulation and not attempt to restate or paraphrase the requirements. Doing so, particularly when only a portion of the referenced regulation is restated is paraphrased, is likely to lead to confusion, misunderstanding and/or the application of inappropriate requirements.

Response 14:

See Responses 1(d) and 1(g). No change has been made in response to this comment.

Comment 15:

Section D.1.8, Pages 28 – 29. This Section references deadlines relating to testing that have passed. Accordingly, references to these testing dates should be deleted.

Response 15:

Pursuant to CP 147-9798-00050, issued on December 30, 1998, no later than April 11, 2006, the Permittee shall perform PM and PM_{10} testing for the hydrochloric acid production system at Process line no. 1, in order to demonstrate compliance with Conditions D.1.1 and D.1.2 utilizing methods as approved by the Commissioner. Any testing extensions are granted by the IDEM, OAQ, Compliance Data Section. The test was performed on June 29, 2006. IDEM, OAQ, has not received the results. The testing requirement will not be removed from the permit.

Comment 16:

Section D.1.9, Pages 29 – 31. Section D.1.9(f) should include a provision allowing AMROX to use appropriate modified testing methods, such as the method utilizing a blank impinger described above and more fully set forth in the January 2006 correspondence, to ensure that test results are accurate.

Response 16:

The blank impinger should be included in the site-specific test protocol, and is not a condition of the permit. No change has been made in response to this comment.

Comment 17:

Sections D.1.11 – D.1.16, Pages 31 – 35. To provide consistency and avoid confusion, these sections should be replaced with the Compliance Monitoring Requirements section currently established by IDEM in Magnetics International, Inc.'s Part 70 Permit No. T 127-7555-00039.

Response 17:

The compliance monitoring requirements in this permit are equivalent to those required in the Magnetics International, Inc. Part 70 Operating Permit, modified in SPM 127-22051-00039, issued on March 31, 2006, with the following exceptions:

(a) The Magnetics International, Inc. permit requires visible emission notations of the iron oxide storage bins and the loading and unloading station, while this permit requires visible emission notations of the hydrochloric acid production system and iron oxide storage bin stack exhausts. Visible emission notation requirements of the hydrochloric acid production system roasters were removed from the Magnetics International, Inc. Part 70 Operating Permit in SPM 127-22051-00039, issued on March 31, 2006, and the reason stated was, "Daily visible emission notations are not required for the scrubber controlling the roaster as the scrubber is for control of hazardous air pollutants (HAPs) and for control of particulate emission." One (1) venturi separator/scrubber on each hydrochloric acid production system controls particulate emissions, and each system exhausts through a single stack. Visible emission notations are used to monitor compliance with particulate emission limitations. Therefore, Condition D.1.12 will not be revised in response to this comment.

(b) Pursuant to CP 147-9798-00050, issued on December 30, 1998, the pressure drop across each baghouse for the iron oxide storage bins at this source 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. Therefore, the Permittee is required to record the time and pressure drop across each baghouse for every instance that the alarm sounds, rather than once each day as required by the Magnetics International, Inc. permit. In addition, the ranges set for the pressure drop are different for each plant, based upon the testing conducted at that particular facility. Therefore, Condition D.1.13 will not be changed in response to this comment. The same response applies to Condition D.1.15(c). The pressure sensors were also included as indicators in the Compliance Assurance Monitoring (CAM) Plan submitted by the applicant on July 12, 2004.

(c) This permit requires monitoring of the scrubbing liquor flow rate, whereas the Magnetics International, Inc. permit does not. IDEM, OAQ, generally requires monitoring of this parameter for scrubbers controlling particulate emissions. In addition, it was included in the Compliance Assurance Monitoring (CAM) Plan submitted by the applicant on July 12, 2004. Therefore, Condition D.1.15(a) will not be changed in response to this comment.

(d) Condition D.1.16 of this permit includes monitoring requirements from the Compliance Assurance Monitoring (CAM) Plan submitted by the applicant on July 12, 2004. A CAM Plan will be required for Magnetics International, Inc. at the time of renewal if a Part 70 Operating Permit is required for this source, the source involves a pollutant-specific emissions unit as defined in 40 CFR 64.1 for a regulated pollutant with the potential to emit before controls equal to or greater than the major source threshold, the emission units are subject to an

emission limitation or standard for that pollutant, and the emission units use a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard. No change has been made in response to this comment.

Comment 18:

Sections D.1.17 – D.1.19, Pages 35 – 37. See Comment 6 regarding consideration of IDEM's initiative to reduce burdensome, unnecessary and/or redundant reporting and recordkeeping requirements. These sections should be revised as appropriate to reflect that initiative.

Response 18:

See Responses 1(f) and 9. No change has been made in response to this comment.

Comment 19:

Quarterly Report Form, Pages 42 – 43. See Comment 1(e) above regarding revision of terms describing the Facility and its operations. See also Comment 1(g) above regarding the Facility's major or minor source status. Should testing determine that the Facility is not a major source, quarterly reports are not required. In addition, the attached Part 70 Quarterly Reports reflect incorrect limits. The 506,000 tons for ferrous chloride is significantly above the 15 tons per hour per plant on an annualized basis. The 8,760 ton limit for iron oxide does not correlate to any established Facility capacities or current limit.

Response 19:

See Responses 1(e), 4, and 10, and 1(g) regarding the revision of terms and major source status. The limits on the Quarterly Report Forms are identical to those in Condition D.1.1, which are described in the Technical Support Document (TSD). At the emission limit stated in Condition D.1.1, the ferrous chloride throughput can be as much as 506,000 tons per year, total, and not result in this source being a major modification to AK Steel. The same is true for the iron oxide limit. The applicant can apply to decrease the throughput limits and increase the pound per ton emission limitations, as long as the limited potential to emit is not increased.

((506,000 tons ferrous chloride/yr x 0.05 lbs PM and PM_{10}/ton)/2,000 lbs/ton) + ((8,760 tons iron oxide/yr x 0.15 lb PM and PM_{10}/ton)/2,000 lbs/ton) + unrestricted potential to emit 6.81 tons of PM and 1.666 tons of PM_{10} from all other processes/yr = 12.65 PM/PM_{10} + 0.657 PM/PM_{10} + 6.81 PM or 1.67 PM_{10} tons/yr = 20.1 tons PM/yr and < 15 tons PM_{10}/yr

The report form for the hydrochloric acid production systems has been revised as follows:

Facilities: Two (2) hydrochloric acid ~~recovery~~ **production** systems

Upon further review, the OAQ has decided to make the following changes to the Part 70 Operating Permit: The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is bolded):

Change 1:

The limitations in Condition D.1.1 have been clarified as follows:

D.1.1 PSD Minor Limit [326 IAC 2-2]

(a) The particulate emissions shall be limited as follows:

(1) The total ~~waste pickle liquor~~ **ferrous chloride solution** processing rate shall not

exceed 506,000 tons per twelve (12) consecutive month period, **total,** with compliance determined at the end of each month, and the potential to emit PM and PM_{10} from the two (2) hydrochloric acid ~~recovery~~ **production** systems shall not exceed 0.05 pound per ton of ~~waste pickle liquor~~ **ferrous chloride solution** processed **for each production system**. This will limit the potential to emit PM and PM_{10} from the two (2) hydrochloric acid ~~recovery~~ **production** systems to 12.65 tons per year.

(2) The total iron oxide/nickel ferrite throughput rate at the four (4) iron oxide storage bins (O-1 through O-4) shall not exceed 8,760 tons per twelve (12) consecutive month period, **total,** with compliance determined at the end of each month, and the potential to emit PM and PM_{10} from the four (4) iron oxide storage bins (O-1 through O-4) shall not exceed 0.15 pound per ton of iron oxide/nickel ferrite throughput **for each storage bin**. This will limit the potential to emit PM and PM_{10} from the four (4) iron oxide storage bins (O-1 through O-4) to 0.657 tons per year.

The unrestricted potential to emit PM and PM_{10} from all other processes at this source are 6.81 tons per year and 1.67 tons per year, respectively. Therefore, the limitations in (1) and (2) will limit the potential to emit PM and PM_{10} to less than 25 tons per year and 15 tons per year, respectively. Therefore, the requirements of 326 IAC 2-2, PSD, are not applicable, even if the AK Steel and American Iron Oxide plants are determined to be a single source in the future.

(b) The Permittee shall use low- NO_X burners on all natural gas combustion units. Therefore, the potential to emit NO_X is limited to less than 40 tons per year and the requirements of 326 IAC 2-2, PSD, are not applicable, even if the AK Steel and American Iron Oxide plants are determined to be a single source in the future.

Change 2:

Some conditions in Section D.1 have been revised to ensure that the permit conditions are consistent with the 40 CFR 63, Subpart CCC. The changes to Conditions D.1.4, D.1.5, D.1.9, and D.1.11 are as follows:

D.1.4 National Emission Standards for Hazardous Air Pollutants for Steel Pickling - HCI Process Facilities and Hydrochloric Acid Regeneration Plants [40 CFR Part 63, Subpart CCC] **[40 CFR 63.1158]**

Pursuant to 40 CFR Part 63.1158(b)(1) and (2), Subpart CCC, the hydrochloric acid regeneration plant shall comply with the following requirements:

The Permittee shall not cause or allow to be discharged into the atmosphere from the affected hydrochloric acid regeneration plant:

(a) Any gases that contain HCI in a concentration in excess of 12 ppmv.

(b) Any gases that contain chlorine (Cl_2) in a concentration in excess of either 6 ppmv.

D.1.5 NESHAP Operational and Equipment Standards [40 CFR Part 63.1159, Subpart CCC]

Pursuant to 40 CFR 63.1159, Subpart CCC:

(a) The Permittee shall operate the affected hydrochloric acid regeneration 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 off-gas temperature consistent with producing usable regenerated acid or iron oxide.

(b) The Permittee shall provide and operate, except during loading and unloading of acid, a

closed-vent system for each hydrochloric acid storage 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.

D.1.9 Testing Requirements [40 CFR Part 63.1161, Subpart CCC]

(a) Within six (6) months of permit issuance, the Permittee shall conduct an initial performance test for each affected process or control device to determine and demonstrate compliance with the applicable emission limitation according to the requirements of 40 CFR Part 63.7 (Subpart A, General Provisions). Pursuant to 40 CFR Part 63.1161, Subpart CCC, this initial performance test shall meet the following minimum requirements:

(1) Following approval of the site-specific test plan, the Permittee 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 or measure the concentration of HCl and Cl_2 for hydrochloric acid regeneration plants in gases exiting the process or the emission control device **to determine compliance with the applicable emission concentration standards**.

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

(3) Compliance is achieved if either the average collection efficiency as determined by the HCl mass flows at the control device inlet and outlet is greater than or equal to the applicable collection efficiency standard, or the average measured concentration of HCl or Cl_2 exiting the process or the emission control device is less than or equal to the applicable emission concentration standard.

(b) During the performance test for each emission control device, the Permittee 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 Permittee shall determine the operating parameter monitoring values as in 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 40 CFR Part 63.1161(a)(2). A Permittee may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, a Permittee 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 off-gas temperature and the maximum proportion of excess air fed to the process as described in 40 CFR Part 63.1162(b)(1). 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~~ **40 CFR 63.1161(a)(2)**. 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 Cl_2 of 6 ppmv when operated within its design parameters. The alternative concentration standard shall be established through performance testing while the plant is operated at maximum design temperature and with the minimum proportion of excess air that allows production of iron oxide of acceptable quality while measuring the Cl_2 concentration in the process exhaust gas. The measured concentration shall be the concentration standard for that plant.

(d) Pursuant to 40 CFR 63.1162(a)(1), performance tests shall be conducted either annually or according to an alternative schedule approved by IDEM, OAQ, but no less frequently than every two and half (2.5) years or twice per Part 70 Operating Permit term. If any performance test shows that the HCI emission limitation is being exceeded, the Permittee is in violation of the emission limit.

(e) Pursuant to 40 CFR Part 63.1163(d), the Permittee of an affected source shall notify IDEM, OAQ 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 IDEM, OAQ to review and approve the site-specific test plan required under 40 CFR Part 63.7(c), and, if requested by IDEM, OAQ, to have an observer present during the test.

(f) The following test methods from Appendix A of 40 CFR Part 60 shall be used to determine compliance under ~~Conditions D.1.2 and D.1.3, if required~~ **40 CFR 63.1158(b)**:

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

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

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

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

(5) Method 26A, “Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources B 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. 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 (dscm) [30 dry standard cubic feet (dscf)]. The concentration of HCl shall be calculated for each run as follows: $C_{HCL(ppmv)} = 0.659\ C_{HCL(mg/dscm)}$, where $C_{(ppmv)}$ is concentration in ppmv and $C_{(mg/dscm)}$ is concentration in milligrams per dry standard cubic meter as calculated by the procedure given in Method 26A.

(6) The Permittee may use equivalent alternative measurement methods approved by U.S. EPA.

D.1.11 Monitoring Requirements [40 CFR Part 63.1162]

(a) The Permittee shall:

(1) ~~(a) The Permittee shall i~~**Install**, operate and maintain systems for the measurement and recording of the scrubber makeup water flow rate and, if required, recirculation water flow rate for all scrubbers used to comply with the requirements of 40 CFR Part 63, Subpart CCC. 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 40 CFR Part 63.1160(b)(2).

(2)~~(b)~~ Failure to record each of the operating parameters in 40 CFR Part 63.1162(a)(2) is a violation of the monitoring requirements of 40 CFR Part 63, Subpart CCC.

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

(4)~~(d)~~ The Permittee may develop and implement alternative monitoring requirements subject to approval by IDEM, OAQ.

~~(e)~~**(b)** The Permittee ~~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 off-gas 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 40 CFR Part 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 five percent (5%) 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 off-gas 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 40 CFR Part 63.1159(a) of this subpart.

~~(f)~~**(c) Pursuant to 40 CFR 63.1162,** ~~T~~**t**he Permittee shall inspect each hydrochloric acid storage 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.

Change 3:

Since this is an initial Part 70 Operating Permit and not a Renewal, the word “Renewal” as been removed from the cover page of the permit as follows:

PART 70 OPERATING PERMIT ~~RENEWAL~~

Change 4:

The Compliance Section phone and facsimile numbers have been updated in Condition B.11 and on the Emergency Occurrence Report, as follows:

Telephone Number: 317-233-~~5674~~ **0178** (ask for Compliance Section)
Facsimile Number: 317-233-~~5967~~ **6865**

Change 5:

Condition B.12(a) has been corrected as follows:

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 ~~in~~ 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.

Appendix A: Emission Calculations
Process Lines

Company Name: American Iron Oxide Company
Address City IN Zip: 2001 East County Road 700 North, Grandview, Indiana 47615
Permit Number: 147-16252
Plt ID: 147-00050
Reviewer: CarrieAnn Paukowits
Date: October 21, 2002

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 (tons/yr)	HCl (tons/yr)	Cl2 (tons/yr)	NOx (tons/yr)	PM/PM10 Control Efficiency	HCl Control Efficiency	Potential to emit before control: 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: Cr (tons/yr)	Ni (tons/yr)		Potential to emit before control: 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: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: American Iron Oxide Company
Address City IN Zip: 2001 East County Road 700 North, Grandview, Indiana 47615
Permit Number: 147-16252
Plt ID: 147-00050
Reviewer: CarrieAnn Paukowits
Date: October 21, 2002

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.90	7.60	0.600	50	5.50	84.0
				**see below		

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

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

Equipment	Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Potential Emission in tons/yr					
			PM*	PM10*	SO2	NOx	VOC	CO
Roaster, Process line no. 1	26.80	234.768	See page 1	See page 1	0.070	See page 1	0.646	9.860
Roaster, Process line no. 2	26.80	234.768	See page 1	See page 1	0.070	See page 1	0.646	9.860
One (1) boiler	8.00	70.08	0.067	0.266	0.021	1.752	0.193	2.943
Total	**61.60**	**540**	**0.067**	**0.266**	**0.162**	**1.75**	**1.48**	**22.7**

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission 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 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
See page 3 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 East County Road 700 North, Grandview, Indiana 47615
Permit Number: 147-16252
Plt ID: 147-00050
Reviewer: CarrieAnn Paukowits
Date: October 21, 2002

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	0.002	0.001	0.075	1.80	0.003
Potential Emission in tons/yr	0.0006	0.0003	0.020	0.486	0.0009

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel	Total HAPs
Emission Factor in lb/MMcf	0.0005	0.001	0.001	0.0004	0.002	
Potential Emission in tons/yr	0.0001	0.0003	0.0004	0.0001	0.0006	**0.509**

Methodology is the same as page 2.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emission Calculations
Iron Oxide Bins

Company Name: American Iron Oxide Company
Address City IN Zip: 2001 East County Road 700 North, Grandview, Indiana 4761
Permit Number: 147-16252
Plt ID: 147-00050
Reviewer: CarrieAnn Paukowits
Date: October 21, 2002

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: Emission Calculations
Unpaved Roads

Company Name: American Iron Oxide Company
Address City IN Zip: 2001 East County Road 700 North, Grandview, Indiana 47615
Permit Number: 147-16252
Plt ID: 147-00050
Reviewer: CarrieAnn Paukowits
Date: October 21, 2002

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

2.0	trips/hr x			
0.2	miles/roundtrip x			
8760	hrs/yr =		**3504**	miles per year

For PM		**For PM-10**	
	Ef =	{k*[(s/12)^0.8]*[(W/3)^b]/[(Mdry/0.2)^c]}*[(365-p)/365]*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	Mdry =	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

	7.69	lb/mi x	3504	mi/yr =	**PM**	**13.48**	**tons/yr**
		2000	lb/ton				
	1.60	lb/mi x	3504	mi/yr =	**PM-10**	**2.80**	**tons/yr**
		2000	lb/ton				

Percent emitted after control: 50%

After Control emissions

PM	**6.74**	**tons/yr**
PM-10	**1.40**	**tons/yr**

Addendum Appendix A: Revised Emissions Calculations
Natural Gas Combustion
MM BTU/HR <100

Company Name: American Iron Oxide Company
Address City IN Zip: 2001 East County Road 700 North, Grandview, Indiana 47615
Permit Number: 147-16252
Plt ID: 147-00050
Reviewer: CarrieAnn Paukowits
Application Date: October 21, 2002

Pollutant

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.90	7.60	0.600	50 **see below	5.50	84.0

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

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

Based on Application

Equipment	Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Potential Emission in tons/yr					
			PM*	PM10*	SO2	NOx	VOC	CO
Roaster, Process line no. 1	26.8	234.768	See page 1	See page 1	0.070	See page 1	0.646	9.86
Roaster, Process line no. 2	26.8	234.768	See page 1	See page 1	0.070	See page 1	0.646	9.86
Total	**53.60**	**470**	**0.000**	**0.000**	**0.141**	**0.00**	**1.29**	**19.7**

Based on Public Notice Comments

Equipment	Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Potential Emission in tons/yr					
			PM*	PM10*	SO2	NOx	VOC	CO
Roaster, Process line no. 1	39.6	346.896	See page 1	See page 1	0.104	See page 1	0.954	14.6
Roaster, Process line no. 2	39.6	346.896	See page 1	See page 1	0.104	See page 1	0.954	14.6
Total	**79.20**	**694**	**0.000**	**0.000**	**0.208**	**0.00**	**1.91**	**29.1**

Increase

Equipment	Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Potential Emission in tons/yr					
			PM*	PM10*	SO2	NOx	VOC	CO
Roaster, Process line no. 1	39.6	346.896	See page 1	See page 1	0.034	See page 1	0.308	4.71
Roaster, Process line no. 2	39.6	346.896	See page 1	See page 1	0.034	See page 1	0.308	4.71
Total	**79.20**	**694**	**0.000**	**0.000**	**0.067**	**0.00**	**0.617**	**9.42**

Based on Public Notice Comments

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	0.002	0.001	0.075	1.80	0.003
Potential Emission in tons/yr	0.0007	0.0004	0.0260	0.6244	0.0012

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel	Total HAPs
Emission Factor in lb/MMcf	0.0005	0.001	0.001	0.0004	0.002	
Potential Emission in tons/yr	0.0002	0.0004	0.0005	0.0001	0.0007	**0.655**

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission 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 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.